

Strengthen institutional and technical capacities in the agricultural and forestry sectors of Nicaragua to respond to the requirements of the enhanced transparency framework under the Paris Agreement

FAO

Other Executing Partner(s):

Nicaraguan Institute of Agricultural Technology (INTA) National Forestry Institute (INAFOR) Ministry of the Environment and National Resources (MARENA) Nicaraguan Institute of Land Studies (INETER)

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Paris Agreement, United Nations Framework Convention on Climate Change, Climate Change, Focal Areas, Strengthen institutional capacity and decision-making, Influencing models, Beneficiaries, Stakeholders, Gender Mainstreaming, Gender Equality, Capacity Development, Capacity, Knowledge and Research, Knowledge Generation

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

10/2/2018

Expected Implementation Start

3/1/2020

Expected Completion Date

2/28/2023

Duration

36In Months

Agency Fee(\$)

82,008

A. FOCAL/NON-FOCAL AREA ELEMENTS

| Objectives/Programs | Focal Area Outcomes | _ | rust | GEF Amount(\$) | Co-Fin Amount(\$) |
|---------------------|--|------------|--------|-------------------|----------------------|
| CCM-3-8 | CCM-3-8 Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through capacity building initiative for transparency | | | 863,242 | 5,491,524 |
| | | Total Proj | ect Co | st(\$) 863,242 | 5,491,524 |

B. Project description summary

Project Objective

To strengthen technical and institutional capacities in the agricultural and forestry sectors in response to the enhanced transparency requirements under the Paris Agreement, in harmony with the Nicaraguan National Human Development Plan (PNDH, acronym in Spanish) and the guidelines set forth in the National Climate Change Mitigation and Adaptation Policy (PNMACC).

| Project Component | Financin | Expected Outcomes | Expected Outputs | Trust | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|--------------------------|----------|--------------------------|-------------------------|-------|---------------------------|----------------------------|
| | g Type | | | Fund | | |

| Project Component | Financin g Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|--|-------------------------|--|--|---------------|---------------------------|----------------------------|
| Component 1: Strengthen institutional capacities to meet the requirements of the Enhanced Transparency Framework (ETF), under the Paris Agreement, in the agricultural and forestry sectors. | Technical Assistance | 1.1 Capacities at the interinstitutional technical team (ITT), whose members are INTA, INAFOR, MARENA, MEFCCA and INETER, are strengthened regarding ETF requirements for implementation of PNMACC guidelines, as well as PNDH mandates. | 1.1.1 Consolidate the national coordination of the ITT platform, the National Climate Change Response System (SNRCC) and the National Production, Consumption and Commerce System (SNPCC), to provide follow-up, evaluate strategies and accompany proposals for policies, in keeping with ETF requirements. | GET | 264,604 | 242,045 |
| | | | 1.1.2 Design and implement a training programme for the ITT, leading to decision-making based on knowledge regarding national processes, as per ETF requirements. | | | |
| | | | 1.1.3 Design and implement an experience exchange programme keyed to the ITT, with international platforms and research centres linked to measuring, reporting and verification (MRV) of emissions in the agricultural and forestry sectors, in accordance with the ETF. | | | |

| Project Component | Financin g Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|--|-------------------------|--|---|---------------|---------------------------|----------------------------|
| Component 2: Research and generation of information, with the aim of strengthening reports and following up on progress achieved through mitigation and adaptation actions in the agricultural and forestry sectorsq | Technical Assistance | 2.1 Technical capacities strengthened for purposes of monitoring, quantification and analysis of data necessary to generate GHG emissions reports, monitoring and evaluating the prioritised sectors | 2.1.1 Design a national plan for the evaluation, monitoring and surveillance of GHG emissions in the agricultural and forestry sectors, to be coordinated by MARENA in the framework of the SNRCC. 2.1.2 Strengthen INAFOR capacities in the use of tools (second National Forest Inventory measuring cycle and adaptation of the Silva Metricus) at the National Forest Monitoring System (SMFN, acronym in Spanish). | GET | 382,386 | 5,194,156 |
| | | | 2.1.3 Strengthen INTA capacities by means of specialised technical and methodological tools in order to determine emissions factors in the agricultural sector and at INAFOR, for the purpose of calibrating the allometric equations of forests and agroforestry systems. These in turn will be used to generate ETF reports. | | | |

2.1.4 Methodologies are

| Project Component | Financin g Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|---|-------------------------|---|---|---------------|---------------------------|----------------------------|
| Component 3: Dissemination of good practices and lessons learnt at national and international levels. | Technical Assistance | 3.1 Improved education, communication and institutional human capacity regarding climate change mitigation, emissions reduction and its effects on prioritized sectors. | 3.1.1 Lessons are learnt and knowledge is shared on the agricultural and forestry sectors national platform (SINIA) and internationally (e.g. CBIT global coordination platform) to improve programming and the presentation of reports, in accordance with enhanced transparency requirements. 3.1.2 Design and implement a plan for the dissemination of information on good practices regarding adaptation to and mitigation of climate change, as per PNMACC guidelines 1, 5 and 6, in the framework of enhanced transparency, aimed at public officials, universities and producers on farms and in forests. | GET | 142,252 | 37,323 |
| | | | Sub T | otal (\$) | 789,242 | 5,473,524 |

Project Management Cost (PMC)

| 18,000 | 74,000 | GET |
|-----------|---------|------------------------|
| 18,000 | 74,000 | Sub Total(\$) |
| 5,491,524 | 863,242 | Total Project Cost(\$) |

C. Sources of Co-financing for the Project by name and by type

| Sources of Co- financing | Name of Co-financier | Type of Co- financing | Investment Mobilized | Amount(\$) |
|-----------------------------|---|--------------------------|-------------------------|------------|
| Government | Nicaraguan Institute of Agricultural Technology (INTA) | In-kind | Recurrent expenditures | 118,800 |
| Government | Ministry of the Environment and Natural Resources (MARENA) | In-kind | Recurrent expenditures | 181,924 |
| Government | National Forestry Institute (INAFOR) | In-kind | Recurrent expenditures | 43,200 |
| Government | Nicaraguan Institute of Territorial Studies (INETER) | In-kind | Recurrent expenditures | 50,400 |
| Government | Ministry of Family, Community, Cooperative and Associative Economy (MEFCCA) | In-kind | Recurrent expenditures | 32,400 |
| Donor Agency | REDD+ readiness support from the Forest Carbon Partnership Facility – FCPF grant no. TF099264 | Grant | Investment mobilized | 5,000,000 |
| Donor Agency | FAO | In-kind | Recurrent expenditures | 64,800 |
| | | | | |

Total Co-Financing(\$) 5,491,524

Describe how any "Investment Mobilized" was identified

The Donor Agency "World Bank / FCPF" offered to mobilize resources in support of the GEF donation through support activities such as the development of the National Forest Monitoring System, the operation of the MRV table and the first report of Levels of References of Emissions from Deforestation and Forest Degradation.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

| Agency | Trust Fund | Country | Focal Area | Programming of Funds | Amount(\$) | Fee(\$) |
|--------|------------|-----------|----------------|---------------------------|------------|---------|
| FAO | GET | Nicaragua | Climate Change | CBIT Set-Aside | 863,242 | 82,008 |
| | | | | Total Grant Resources(\$) | 863,242 | 82,008 |

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required

PPG Amount (\$)

50,000

PPG Agency Fee (\$)

4,750

| | | | | Total Project Costs(\$) | 50,000 | 4,750 |
|--------|------------|-----------|----------------|-------------------------|------------|---------|
| FAO | GET | Nicaragua | Climate Change | CBIT Set-Aside | 50,000 | 4,750 |
| Agency | Trust Fund | Country | Focal Area | Programming of Funds | Amount(\$) | Fee(\$) |

Core Indicators

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

| | Number (Expected at PIF) | Number (Expected at CEO Endorsement) | Number (Achieved at MTR) | Number (Achieved at TE) |
|--------|--------------------------|--------------------------------------|--------------------------|-------------------------|
| Female | | 100 | | |
| Male | | 100 | | |
| Total | 0 | 200 | 0 | 0 |

Part II. Project Justification

1a. Project Description

- 1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)
- 1. In addition to the information presented in the GEF Project Identification Form (PIF), this section contains updated information which was gathered during the project preparation grant (PPG).
- 2. **Global Context.** The Paris Agreement was adopted at the 21st Conference of Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) in December of 2015. It went into force on 4 November 2016 and at COP 24 held in December 2018, when the Katowice climate package or "Rulebook" was approved. The Rulebook defines the essential procedures and mechanisms that are to make the Paris Agreement operational.[1]¹ For its part, the Paris Agreement has for its ambitious objective to limit global warming to well under 2°C in relation to pre-industrial levels, while efforts are made to keep the increase in temperature to around 1.5°C. According to the Intergovernmental Panel on Climate Change (IPCC), if we are serious about limiting global warming to 1.5°C, we will have to reduce our emissions of CO2 by approximately 45% by 2030 (in relation to levels in 2010). Indeed, keeping to a limit of 2°C will require a transition to an economy neutral in carbon emissions by mid-century, three decades from now.
- 3. In order to meet the Convention's goal, the parties need reliable, transparent and complete information regarding climate actions and support. By virtue of the Agreement, all parties are obligated to communicate the information pertinent to the implementation of COP article 12. The information and transparency system allows for understanding the degree of ambition and progress made regarding climate actions; to that end it is necessary to communicate information regarding greenhouse gas emissions and the actions being taken to reduce them. It is also necessary to report on finances, technology transfers, capacity development and operational mechanisms at policy level which serve to measure the impacts of climate change on the most vulnerable population groups.
- 4. Article 13 of the Paris Agreement describes an Enhanced Transparency Framework (ETF) intended to generate trust and confidence that all countries are making their contribution to the global effort. The figure below contains the basic provisions of the transparency framework.



Article 13 of the Paris Agreement: transparency of action and support

Reporting

All Parties (shall)

- National greenhouse gas (GHG) inventory report (Article 13.7(a))
- Progress made in implementing and achieving nationally determined contribution (NDC) (Article 23.7(ld))

All Parties (should, as appropriate)

 Climate change impacts and adaptation (Article 23.8)

Developed country Parties (shall) and other Parties that provided support (should)

Financial, technology transfer and capacitybuilding support provided to developing country Parties under Article 9, 10 and 11 (Article 18 9)

Developing country Parties (should)

Financial, technology transfer and capacitybuilding support needed and received under Articles 9, 10 and 11 (Article 18.10)

Technical expert review

All Parties (shall)

Undergo technical expert review of information submitted under Articles 13.7 (Article 13.11)



Developed country Parties (shall)

 Undergo technical expert review of information submitted under Articles 13.9 (Article 23.23)

Multilateral facilitative consideration

All Parties (shall)

- Multilateral facilitative consideration of progress with respect to efforts under Article 9, and its respective implementation and achievement of its NDCs (Article 13.11)
- * The transparency framework shall provide flexibility in the implementation of the provisions of this Article to those developing country Parties that need it in the light of their capacities (Article 13.2);
- * The transparency framework shall recognize the special circumstances of the least developed countries and small island developing States (Article 13.3).

- 5. ETF details, modalities, procedures and associated guidelines were approved in decision 18 of COP 24, held in December 2018[2]². There are three aspects worth highlighting in this decision: point 3 states that "it is decided that the parties are to present their first biennial transparency report as well as their first national inventory report, if these are presented as independent reports, in accordance with the modalities, procedures and guidelines, by 31 December 2024 at the latest"; point 8 "urges and requests the Global Environment Facility (GEF) as the operational entity of the financial mechanism, to assist developing countries in their replenishment cycles to prepare their first and subsequent biennial transparency reports" (strategic importance of implementing the CBIT); and point 11 "requests that the Global Environment Facility (GEF) continue to support the functioning of the Capacity-Building Initiative for Transparency as a priority need related to the delivery of the reports".
- 6. At the CBIT Introductory Workshop in Nicaragua the sections of the annex to decision 18 taken at COP 24 were reviewed for the purpose of learning more about the areas required in the Enhanced Transparency Framework; the types of information which Nicaragua, as a state party to the UNFCCC, is expected to regularly prepare and guide through the CBIT Project preparedness phase; the evaluation of the country's capacity to implement an ETF; and to identify existing gaps and needs in order to be able to generate reports that include information regarding: a) a national inventory of greenhouse gases; b) progress made in the implementation and achievement of nationally determined contributions (NDCs); c) impacts of climate change and adaptation; and d) needed and received financial support, technology transfers and capacity development.
- 7. **National context.** At the Introductory Workshop the progress made thus far by Nicaragua as a state party to the UNFCCC was reviewed and updated. In 2018 the Third National Communication and the Nationally Determined Contribution (NDC) was delivered to the UNFCCC[3]³. In January 2019 the Forest Emissions Reference Levels (NREF) for the decade from 2005-2015[4]⁴ was presented, and in February 2019 the National Mitigation and Adaptation to Climate Change Policy was approved (PNMACC), as was the National Climate Change Response System (SNRCC)[5]⁵. Nicaragua also signed on September 27, 2019 the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and the Caribbean. [6]⁶
- 8. According to the NREF document, Nicaragua is blessed with a wealth of natural resources that make a significant contribution to economic growth and food and energy security. Sixty per cent (60%) of the national territory is under forest cover or suitable for forestry, with more than twenty varied ecosystems that are rich in biodiversity, fauna and flora. The potential of the forest sector to contribute to the human development of the Nicaraguan population is high, but currently underused. In economic terms, the forest sector contributes 1% of the gross national product (GNP). However, at the foundation of Nicaragua's forest resources lie its natural forests (broadleaf and coniferous) and plantations. In 2015 it was estimated that the total forested area comprised 3.4 million hectares (ha), or roughly 30% of the country's total land area. The contribution of the forest sector to the development of indigenous people is incalculable, given that their livelihoods are inextricably interwoven with the forest and that 70% of all natural forest is in indigenous territories (INAFOR 2009)[7]?

- 9. **Priorities set forth in Nicaragua's Nationally Determined Contributions.** The NDC presented by Nicaragua describe national priorities as concerns ways in which to mitigate and adapt to climate change, as well as the economic, social and environmental benefits of setting these priorities. [8]8 Under mitigation the priority is the Land Use, Land Use Changes and Forestry sector (LULUCF), given that it represented 67.8% of emissions in the year 2010. In second place is the energy sector, with 29.4% of emissions that same year. Regarding adaptation, the priorities are to develop a national water capture and irrigation system promotion programme in Nicaragua's "dry corridor", I order to increase efficacy in biosphere protection by means of a physical planning programme and to boost reforestation, capacity development, access to technology and financing of the agricultural sector. Finally, it is a priority to implement resilient ecosystem management programmes selected using a landscape approach. These priorities are included in the PNMACC (guidelines 1, 5, 6 and 7), which are those that contribute to the CBIT Project in Nicaragua.
- 10. **Mitigation.** Nicaragua's Nationally Determined Contribution (NDC) to climate change mitigation includes the energy, land use and land-use changes sectors by means of measures that increase sources of renewable energy such as solar, geothermal, natural gas and wind, as well as forest conservation and recovery. Nicaragua's NDC has among its aims to achieve its goals based on that which is set forth in the regulatory and policy instruments by means of national contributions and foreign investment, both in the energy and LULUCF sectors. In the latter, the level of ambition could increase, depending on the level of international financial support to help slow down the advance of the agricultural frontier.
- 11. Nicaragua proposes to attain its mitigation objectives in the LULUCF sector by implementing the National Strategy for Reducing Emissions from Deforestation and Forest Degradation (ENDE-REDD+). In the year 2008 Nicaragua began negotiations to embark upon the readiness process in the framework of REDD+ and in 2013 a REDD+ initiative financed by the Forest Carbon Partnership Facility (FCPF) and administrated by the World Bank (WB) was approved. According to the initiative, Nicaragua is to implement a forest conservation programme and work to avoid further degradation. This was subsequently approved at the CPFC's twentieth meeting, held on 8 July 2019[9]⁹, and is scheduled for execution between 2020-2024. The goal is to reduce emissions by 11 million tonnes of CO2eq. in the protected areas (parks) in the Nicaraguan Caribbean Coast Autonomous Regions.[10]¹⁰
- 12. Another possible mitigation potential studied were Nicaragua's 72 protected areas. Of these 25 are in the Pacific region (10,689 ha of mainly dry forests). In the Central region are another 5,282 ha of both dry and sub-humid forests. In the autonomous regions of the Caribbean Coast there are wet and very wet zones (15,272 ha). Also on the Caribbean Coast are two large biosphere and biological reserves which together account for 2,232,968 ha. A study undertaken in the framework of the Third National Communication on Climate Change indicates that in 2015 the protected areas were emitting 4,316.66 gigagrams of CO2eq. and absorbed 10,798.45 gigagrams of CO2eq. This goes to show that even in these protected areas, significant resources are needed to ensure conservation.

- 13. Among other measures and policies in the Land Use and Land Use Change Sector, agroecological production will be promoted as a national contribution, as will the planting of permanent crops which grow under shade and are resistant to the impacts of climate change, as well as the reduction of extensive cattle-ranching practices and the incorporation of forests to idle land that allows for conserving national capacities regarding carbon sinks. The empirical information derived from the studies and observing experiences in processes and programmes developed in Nicaragua demonstrate the existence of adaptation practices, in large measure led by women. A large amount of practices were identified that may be considered part of the climate change adaptation strategies, such as agroecology, the use of native seeds, drought-resistant species, forest and agroforestry management, saving of water and fuelwood and comprehensive water resources management, among others. The recovery, multiplication, improvement, commercialization and exchange of native and domesticated foreign seeds of different crops, promoted by organic agriculture, are considered an excellent strategy by which to deal with the consequences of climate change while ensuring food security, taking into account that these seeds, having adapted to the agroclimate and edaphology in their territories, develop resistance to pests and diseases.
- 14. **Adaptation.** Due to its geographic position and characteristics, Nicaragua is exposed to several types of events linked to natural climate variability, such as the *El Niño-Southern Oscillation* phenomenon, the monsoon systems in the Pacific and tropical waves and hurricanes, among others. These generate significant threats such as droughts, floods, landslides, water scarcity, the destruction of crops, forests and homes, with differentiated effects upon women and men.
- 15. Nicaragua proposes to reach its adaptation objectives in the agriculture, forestry and other land uses (AFOLU) sector through measures such as the development of water collection and irrigation systems in the country's "dry corridor"; strengthening national capacity in climate finance so as to facilitate access to financial sources; increasing the efficacy of biosphere reserve protection through a physical planning programme; and the promotion of reforestation, capacity development, access to technology and financing in the agricultural sector, while implementing resilient management programmes for prioritized ecosystems with a landscape approach.
- 16. In this context, Nicaragua is implementing a gradual approach in order to meet the commitments made in the framework of the Paris Agreement and will concentrate its efforts first in the AFOLU sector. As described in the foregoing, this sector is not only the most significant in terms of emissions, but also presents the greatest challenges in terms of the gathering and analysis of the data needed to implement guidelines 1, 5, 6 and 7 of the PNMACC and developing better techniques, as defined in the NREF. As a second step, the country will base its subsequent efforts on this experience, which will be useful to other sectors mentioned in the PNMACC.

Barriers

| 17. The implementation of the Paris Agreement Transparency Framework represents a major challenge for Nicaragua. The main limitations are related to i) a lack of standardized |
|--|
| and systematic processes by which to incorporate the information from the various institutions; ii) limited technical knowledge concerning GHG, IPCC methodologies and |
| UNFCCC instruments; and iii) dispersed institutional platforms from which to monitor, report and document information regarding climate change. Some even more specific |
| barriers have been identified that must be overcome in order to comply with ETF requirements and thus justify the Project. For its part, the government of Nicaragua has |
| prioritized the work set forth in this proposal by focusing on the AFOLU sector, with the aim of scaling up based on this experience and improving MRV activities in other |
| sectors, recognizing the significant methodological differences implicit in each. For example, the energy sector has made considerable progress on MRV, and interinstitutional |
| workshops will be held to exchange experiences. |
| |
| |

18. In this regard, and taking into account the approval of the National Climate Change Mitigation and Adaptation Policy (PNMACC) and the creation of the National Climate Change Response System (SNRCC), the barriers analysed during the preparation of the PIF have been reviewed.

19. The restriction concerning requiring, defining and implementing an articulation and coordination mechanism between the National Production, Consumption and Commerce System (SNPCC) has been updated, given that now the SNRCC has this mandate in article 8 of Decree No. 07-2019. The restriction as regards the need to use better techniques when updating the National Report on Greenhouse Gases, taking into account the methodological improvements implemented to create the NREF, has also been updated, while the requirement to strengthen capacities related to ETF modalities, procedures and guidelines approved at the COP 24 has been made more specific.

20. Table 2, below, reflects the restrictions and barriers Nicaragua faces as it seeks to meet ETF requirements (for all sectors). During the PPG phase the table presented at the PIF has been validated and updated.

Table 1. Restrictions and barriers currently faced by Nicaragua as it prepares to meet ETF requirements

| ETF Requirements | Current restrictions and barriers – Nicaragua |
|---|---|
| National coordination processes established for the purpose of complying with the commitments made to UNFCCC on climate change and other initiatives. | It is required to define and implement an articulation and coordination mechanism between the SNRCC and the SNPCC (article 8, Decree 07-2019). The SNPCC agenda does not include coordination for integrating the information and monitoring of results of climate change adaptation and mitigation actions in a systematic manner, either at territorial or national level. Few staff members at the different institutions involved in the work on the issue of climate change have in-depth knowledge of the contents of the different instruments governing the subject. There is thus deficiency as concerns follow-up and compliance with the obligations established in the Convention and its annexes. Limited knowledge about the Paris Agreement and the Enhanced Transparency Framework. |
| Institutional technical capacities are developed by which to use the tools and methodologies needed to prepare and deliver the national GHG reports, as well as the quantification of the impact of adaptation and mitigation measures and actions. | Only a limited number of professionals are knowledgeable on ETF modalities, procedures and guidelines approved at the COP 24. The institutions aren't directly involved in the preparation of the GHG inventory and reports to the UNFCCC, as they lack the capacities needed to generate information, follow-up and monitoring. Limited number of professionals knowledgeable on IPCC guidelines. The existing information is dispersed. There is a high percentage of uncertainty, as a result of the use of IPCC default emissions factors for the agricultural and forestry sectors. There are no national allometric measurements by which to estimate the biomass stored in the forests. This limits the precision of the measurements of emissions and absorptions generated by the Land Use, Land Use Changes and Forestry (LUCLUCF) sector. There is only limited experience on measurement, reporting and verification (MRV) of the ETF, as well as the monitoring and evaluation of mitigation and adaptation actions. |
| Broad-based dissemination on the causes and actions necessary for the mitigation and adaptation to climate change, in the Enhanced Transparency Framework. | Information on good practices and technologies useful for adaptation to climate change in the agricultural sector is not widely disseminated. Information on the sustainable management of forests as a tool for climate change mitigation and adaptation. There is no platform with information on experiences, technologies and practices that contribute to climate change that is readily accessible to the various actors. In the enhanced transparency framework there is no awareness-raising plan geared toward providing information to the different actors (farmers, cattle-ranchers, students at all levels, population at large). |
| Achieve clarity on the support received, including information on government and donor contributions to strengthen UNFCCC monitoring and information activities. | There is a lack of systematization concerning activities, projects and other information on the development and transfer of climate-friendly technology. |

2) The baseline scenario and any associated baseline projects

- 21. In addition to the information presented in the GEF Project Identification Form (PIF), this section contains updated information which was gathered during the project preparation grant (PPG).
- 22. Institutional framework for an approach to climate change in Nicaragua. In February 2019 the National Climate Change Response System (SNRCC) was created. Its article 8 lists member institutions, as follows: Ministry of the Environment and Natural Resources (MARENA) as coordinating entity, along with 14 representatives, of which 12 are government bodies, among them the National Forestry Institute (INAFOR); the Nicaraguan Agricultural Technology Institute (INTA) and the Nicaraguan Institute of Territorial Studies (INETER). Also represented are two institutions that coordinate at territorial level: the Secretariat for the Development of the Caribbean Coast (SDCC), which facilitates coordination with the autonomous regional governments and the Nicaraguan Institute for Municipal Development (INIFOM), which in turn coordinates activities with the municipal governments, the National Council of Universities and representatives of the private sector. Article 9 defines the ten (10) functions of the SNRCC, four (4) of which are directly linked to the Enhanced Transparency Framework of the Paris Agreement.
- 23. Article 9 of the Decree defines the SNRCC's functions. Most importantly, its creation strengthens the role of MARENA as concerns collecting and systematising the information concerning the country's efforts in terms of adaptation and mitigation, coordinating with other relevant actors and entities in order to socialize information and share responsibility for the following activities and/or needs as defined in the Presidential Decree creating the SNRCC: a) prepare the National Communications and National Greenhouse Gases Inventories; b) prepare the National Climate Change Adaptation Plan; c) prepare the country's climate risk evaluations; d) calculate national greenhouse gas emissions factors through academic and scientific research; e) compile and disseminate the progress made by Nicaragua on matters related to climate change mitigation and adaptation; f) propitiate research on climate change in Nicaragua; and g) negotiate international cooperation and financing for the mitigation and adaptation to climate change.

Situation regarding measurement, reporting and verification in the AFOLU sector

24. Gaps and barriers identified in earlier reports. Nicaragua has developed both capacity and experience through its preparation of three (3) National Communications to the UNFCCC (2001, 2011 and 2018), including National GHG inventories for the GEF, the presentation of the first NDC in 2018 and in 2019 the NREF for the decade from 2005 to 2015. In these UNFCCC reporting processes the support received through enabling projects have been crucial to the preparation of the National Communications, which are

financed by the GEF and the Project in support of readiness for the National Strategy for Reducing Emissions from Deforestation and Forest Degradation (ENDE-REDD+), which is implemented by MARENA, with financing from a World Bank grant under Agreement No. FCPF-NI-TF-099264.

- 25. The process surrounding ENDE-REDD+ has focussed mainly on the forestry sector and has generated outputs such as a National Forest Monitoring System (SNMB, acronym in Spanish), which includes the National Forest Resource Planning System and information on the Multiple Benefits Information System, governance and safeguards[11]¹¹. The SNMB incorporates elements of the spatial data infrastructure and uses Open Geospatial Consortium methodologies and protocols for the exchange and interoperativeness of data and processes. The design process has served to strengthen the technical capacities of the pertinent staff at government institutions such as MARENA, INAFOR and INETER, community leaders, indigenous territorial governments and small or medium farmers (both women and men). Furthermore, a diagnostic of the technological platform took place, involving institutions related to forest issues. Most recently, a prototype of the GeoPortal was designed, through which the emissions reference levels will be systematically evaluated. The ArcGIS Server has been integrated to SINIA and maps will be made. Another important step forward is the preliminary design of an ENDE-REDD+ programme web page that contains all the information and studies generated over the eight (8) years this strategy has been implemented in the country[12]¹².
- 26. The SNMB also has a Monitoring, Reporting and Verification (MRV) Table. Minutes of the most recent MRV Table work session, held on 18 February 2019 to review the progress made in the readiness of Nicaragua's monitoring systems, indicate that the activities plan for 2019 between INAFOR, INETER and MARENA will cover the following activities: development of forest monitoring; establishment of a biodiversity baseline; a safeguards information system; the review and updating of reference levels; an evaluation of historical degradation under IPCC approach 3, the first report to the UNFCCC on the safeguards information system and the delivery of the design of the Nicaraguan MRV system to the UNFCCC[13]¹³.
- 27. As indicated in the NREF document for the decade from 2005 to 2015, Nicaragua has identified the best techniques by which to update National Greenhouse Gases Inventory reports, taking into account the methodological improvements implemented in the construction of the NREF. Currently undergoing analysis and discussion by the national technical teams are the following: a) development of automatization processes for the pre-processing of satellite images; b) construction of allometric equations in order to estimate forest carbon by climate zone; c) development of growth and carbon sequestration studies in secondary forests; d) estimation of organic soil carbon in the forest and non-forest categories and inclusion of these in the NREF; and e) use of satellite images to expand forest degradation studies. [14]¹⁴

- 28. Capacity evaluations during the Project readiness phase. As part of the formulation of this CBIT project, evaluations of existing gaps took place using several tools. Annex I contains a gaps analysis for the implementation of an enhanced transparency framework and capacities development plan at INTA, MARENA, INAFOR, INETER and MEFCCA. In order to identify these gaps in capacities an instrument was adopted that is available on the Capacity Building Initiative for Transparency (CBIT) coordination platform.[15]¹⁵ This methodological instrument consists of four sections, as follows: 1) inventory of greenhouse gases; 2) progress made in the implementation and scope of NDCs; 3) impacts of and adaptation to climate change; and 4) financing, technology transfer and support for the needed and received capacity development. There follows a description of the main findings of these evaluations.
- 29. Section 1. National greenhouse gas inventory. MARENA, as the institution charged with preparing national GHG inventories has a formal mandate and experience in the coordination of the three (3) inventories and a regulatory framework that upholds inventory activities. However, these are not itemised in the national budget. Before the establishment of the National System in Response to Climate Change (SNRCC), only part of the interinstitutional team (MARENA-INAFOR-INETER) participated in inventory-related activities, as per the existing methodology. It is now necessary to improve data-collection arrangements as well as data management tools, for the purpose fine-tuning the IPCC 2006 guidelines. It is also necessary to develop specific emission factors for the agricultural and forestry sectors.
- 30. Section 2. Reporting on progress made and the scope of the NFCs. Institutional arrangements to monitor the implementation of the NDC are pending definition in the framework of the SNRCC. Procedures for the data collection and management are available for the forestry sector, but are still awaiting design in the agriculture sector. The process to monitor NCD implementation is also under development and it is expected that by late 2019 the first report to the UNFCCC on the safeguard system will be ready and the National MRV System will be sent to the UNFCCC.
- 31. Section 3. Report on the impacts of climate change and adaptation. An institutional framework has been established; still pending is the preparation of the National Adaptation Plan. At this time there is no underlying legal framework. Adaptation in the public sector is under development, while design is pending in the case of the private sector. Data collection and management tools for monitoring the implementation of actions related to adaptation are pending both design and development. The country is planning adaptation actions by using the available data and methodologies.
- 32. Section 4. Reports on financing, transferring technology and creating institutional capacities for the support needed and received. The institutional framework has been established and still pending is the design of activities leading to notification of the financial support needed and received. It is also necessary to develop the procedures necessary to prepare the technology transfer needed and received. Still pending is the design of procedures needed to produce the report on capacity strengthening needed and received.

- 33. A capacity diagnosis regarding forest and forest resources monitoring and management was carried out at INAFOR. The information was included in the report to the UNFCCC and other related international commitments. The main findings of this evaluation are as follows: during the execution of the diagnostic it became evident that several institutions (MARENA, INETER, INAFOR and INTA) have several common requirements for methodologies for data collection, monitoring procedures and information management that define the MTR in their MPDs, including the report to the UNFCCC, as well as on matters such as monitoring in the context of the National Monitoring, Measuring, Reporting and Verification System (SNM-MRV). The joint knowledge and capacities strengthening plan for members of these four institutions will contribute to improve the following reports: National Inventory of Greenhouse Gases; Progress Made and Scope of Nationally Determined Actions to Mitigate Climate Change (NDC); and Monitoring of Forest Emissions Reference Levels (NREF).
- 34. A capacity diagnosis intended to determine emissions factors in the agricultural sector was carried out at INTA. The most important findings were as follows: a) only a limited number of professionals are ready to become involved in the preparation of the GHG inventory for the agricultural sector; b) there is only limited knowledge regarding methodologies, tools and equipment to quantify emissions factors; c) there are experiences in the provinces of Matagalpa and Jinotega, where measurements were made on cattle-ranching systems, using default and precision methodologies and tools, with support from the International Centre for Tropical Agriculture.
- 35. A capacity diagnosis took place at INTA, MARENA, INAFOR, INETER and MEFCCA in order to incorporate gender equity to the implementation of the ETF in the AFOLU sector. The aforementioned institutions identified as their main gap the lack of data bases and indicators required to prepare the national communications with a gender approach. The recommendations made to overcome these deficiencies were as follows: a) raise awareness on the gender perspective and its relevance to climate change mitigation and adaptation; b) create institutional capacities on technical matters pertinent to the national communications, from a gender perspective; c) promote and prioritize the participation of women in training and technical strengthening on issues related to climate change; d) place greater emphasis on promoting and visibilising the role of women in the sector, mainly in rural areas; and e) adjust the formats and data collection instruments, in order to prepare the national communications involving women and their activities in the corresponding sector.
- 36. Impacts of climate change and adaptation. It is necessary to create institutional capacities on technical matters regarding climate change and the different roles it plays in the context of each sector, while strengthening methodologies and instruments for putting them into practice, as well as adjusting planning, follow-up and evaluation instruments with a gender perspective. There needs to be more analysis of the adaptation technologies being promoted by the various institutions, for the purpose of fine-tuning cost estimates and the socioeconomic impact of said adaptation from a gender perspective.

37. **Baseline projects.** Considering that the CBIT Project focuses on the forestry and agriculture sectors, there follows a list of relevant national projects being implemented in the AFOLU sector. These are projects which from hereon in the CBIT Project will coordinate closely. Table 1 contains a general description of the projects, its pertinent outputs and its link(s) to the CBIT Project.

Table 2. Reference projects in Nicaragua

| Project | Description | Outputs relevant to the CBIT |
|--------------------------------|---|---|
| ENDE-REDD + / FCPF/ TF | Title: Support to Readiness for the National Strategy for Reducing Emissions from | Outputs most relevant to the CBIT: |
| 099264 / Project No. P120657 / | Deforestation and Degradation (ENDE-REDD+) | |
| BM | | A NREF document for Nicaragua is produced and presented |
| | Objective: To prepare a proposal in support of the implementation of ENDE- | to the UNFCCC. |
| | REDD + | ENDE-REDD+ feedback mechanism with indigenous |
| | | peoples, afrodescendants and rural communities. |
| | Time frame: 2018-2020 | Evaluation of land use, factors that lead to changes in land |
| | | use, forest legislation, policies and institutional management. |
| | Source of financing: Forest Carbon Partnership Facility - FCPF/ TF 099264 / | Technological capacity at the Forest Inventory Unit at |
| | Project No. P120657 / BM | INAFOR strengthened to improve field data collection. |
| | | A National Forest Monitoring System is implemented and |
| | Implementing agency: MARENA, in coordination with INAFOR, INETER, MHCP and SDCC-GRCC. | the ETF Table is functioning. |
| | | These outputs serve as the baseline for the implementation of |
| | Amount: US\$ 5,000,000.00 | activities linked to outputs 1.1, 1.2, 1.3, 2.1 and 2.2 of the CBIT |
| | | Project. |
| | | |

| Project | Description | Outputs relevant to the CBIT |
|---|--|--|
| Emissions Reduction Programme Document (ERPD) | Title: Programme to Reduce Emissions and Fight Climate Change and Poverty on the Caribbean Coast, the BOSAWAS Biosphere Reserve and the Indio Maíz Biological Reserve. | Relevant outputs which the CBIT Project will support regarding implementation of the ERPD: Measuring, Monitoring and Reporting |
| | Objective: Time frame: 2020-2026. (2 years in preparation and five years of intervention) Source of financing: Forest Carbon Partnership Facility FCPF / Carbon Fund Executor: MARENA in coordination with MHCP, MEFFCA, INETER, INAFOR, MAG, SDCC and the regional and territorial governments. Amount: US\$ 57,300,000 (investment – payment for FCPF / Carbon Fund) | Nicaragua is implementing a National Monitoring, Reporting and Verification System (SNMRV). The carbon module will measure, monitor, report and verify (MRV) the state and condition of forests in Nicaragua, as well as the situation concerning deforestation and forest recovery. It will also report on emissions avoided and occurred due to changes in the carbon stock at national level. The CBIT Project will support the development of allometric equations, calibrated with national data, before the first Emissions Reduction Payment Agreement (ERPA) monitoring event (2020-2021). (CBIT output 2.3) The CBIT Project will support the functioning of the MRV Table that distributes GHG monitoring functions in the AFOLU sector among the following three institutions: MARENA, INAFOR and INETER. (CBIT output 1.1) The CBIT Project will support the functioning of the MRV Unit at INETER for one year. (CBIT output 2.1) These outputs will be complemented with activities under outputs 1.1, 2.1 and 2.3 of the CBIT Project. |

| Project | Description | Outputs relevant to the CBIT |
|---------------------------------|--|--|
| Resilience / GEF ID: 5277 / FAO | Project title: Strengthening Resilience in Multiple Use Protected Areas that Offer Global Environmental Benefits Objective: The Project objective is to strengthen the effectiveness of multiple use protected areas management and promote the sustainable use of humid and dry forests in the landscape of western and north-central Nicaragua, for the purpose of ensuring the flow of multiple ecosystemic services, biodiversity conservation, sustainable land management and mitigation of climate change due to conversions in soil use. Time frame: 2020-2024 Source of Financing: GEF ID: 5277 / WB (approved and currently being transferred to FAO as executor) Implementing Agency: MARENA Amount: US\$5,885,515 | Outputs most relevant to the CBIT: • The CBIT Project will execute the GEF's ENDE-REDD+ pilot project, which will offer functional incentives for the conservation of blocks of wet forests with a total surface of 30,000 ha in the Peñas Blancas – Kilambé – Cerro Saslaya Corridor in the municipalities of Siuna, Wiwilí, San José de Bocay and El Cuá, all in the BOSAWAS biosphere reserve. During this process training activities will take place regarding tools and mechanisms related to the forestry MRV, such as the baseline and the monitoring system, in coordination with ENDE REDD+. Likewise, the GEF's ENDE-REDD+ pilot project will comply with all ENDE regulations and requirements for Nicaragua. These actions will be complementary to the activities under outputs 1.2, 1.3, 2.1 and 2.2 of the CBIT project. |
| GPR / GEF ID: 9579 / FAO | Project title: Resilient Landscape Management Objective: To manage resilient productive landscapes that promote forest connectivity, leading to the conservation of biodiversity and ecosystem services in the dry corridor which runs through central Nicaragua. Time frame: 2020-2024 Source of financing: GEF ID: 9579 / FAO Executor: MARENA Amount: US\$ 4,389,261 | Outputs most relevant to the CBIT: • This process consists of training activities in forest MRV tools and mechanisms in the pine forest biological corridor and the Caribbean pine forest in the municipality of Prinzapolka. These actions will be complementary to the activities under outputs 1.2, 1.3, 2.1 and 2.2 of the CBIT project. |

| Project | Description | Outputs relevant to the CBIT |
|-----------------------|---|--|
| Project 4CN y 1er BUR | Project title: Fourth National Communication and First Biennial Update Report to the UNFCCC. Objective: To help Nicaragua prepare its Fourth National Communication, First Biennial Update Report and strengthen national implementation capacity (UNFCCC). Time frame: 2019-2022 Source of financing: GEF (currently the financial proposal, with FAO as executor, is in the formulation stage) Implementing agency: MARENA Amount: US\$ 852,000.00 | Outputs most relevant to the CBIT: A national methodological process is established and adopted by the National Climate Change Response System (road map) for the mitigation and adaptation reports to be presented to the UNFCCC. An analysis of financial, technical, and capacity-related needs required and received, in order to prepare the mitigation and adaptation reports are carried out. The information on the GHG inventory for the years from 2005 to 2015 is prepared and updated for the National Communication and 2016 to 2018 for the BUR in the sectors of energy, industrial processes, solid waste, agriculture and uses and changes in soil use. |
| | | Improved capacities among member institutions of the National Climate Change Response System for the GHG inventory, including planning, preparation, management (to be described and documented). An evaluation of Nicaragua's vulnerability to climate change is carried out, identifying the most vulnerable territories and sectors, as well as collecting information on the needs and priorities of women. The support needed and received regarding technology transfer is identified. Current gaps in measurement, reporting and verification of GHG emissions are analysed and an evaluation, monitoring and surveillance is drawn up for the sectors of energy, solid waste and industrial processes. Capacities are strengthened in the National Climate Change Response System for collection, analysis and reporting, based on indicators pertinent to progress in the NDCs. |
| | | These actions will be complementary to the activities under outputs 1.1, 1.2, 1.4, 1.5, 2.1 and 2.4 of the CBIT Project. |

| Project | Description | Outputs relevant to the CBIT |
|-------------------|--|---|
| Bio-CLIMA project | Title: "Comprehensive climate action to reduce deforestation and increase resilience in the BOSAWAS Biosphere Reserve and Río San Juan". | Outputs most relevant to the CBIT: |
| | Objective: Bio-CLIMA has for its objective to transform extensive cattle-ranching, agricultural and forestry exploitation, which lie at the root of deforestation and forest degradation in the BOSAWAS Biosphere Reserve and the Río San Juan buffer zones, into sustainable ways of production by making them more extensive and free of deforestation. They are to integrate ecosystem conservation and their services with the production of goods and services. | • The project's capacity development component includes investments to strengthen the Enhanced Transparency Framework regarding AFOLU and REDD +, which is currently operated by MARENA, but needs to be updated and linked to the National Forest Inventory and other relevant sectoral information systems. |
| | Source of financing: GEF (currently the financial proposal, with technical assistance from FAO, is in the detailed formulation stage and will be presented to the Central American Bank for Economic Integration (CABEI) as the entity accredited by the Green Climate Fund. Executor: MARENA Amount: US\$ 110 million | |

- 38. In addition to the FCPF-WB and GEF projects mentioned earlier, the Project will also coordinate closely with the following projects receiving international support: CBIT Global Coordination Platform (GEF ID 9675) as well as the other FAO-CBIT global projects.
- 39. FAO will ensure there is coordination with the two FAO-CBIT global projects. As concerns the project titled "Global Capacity-Building Towards Enhanced Transparency in the AFOLU Sector" (CBIT-AFOLU) (GEF ID: 9864), Nicaragua will benefit specifically from resources and tools to be developed under the FAO CBIT-AFOLU proposal; ii) regarding the FAO project titled "Increased Transparency in the Forestry Sector" (CBIT-Forest) (GEF ID: 10071), Nicaragua could also benefit from the activities foreseen in this Project by having its national focal point being involved in the global forest resource evaluation activities (FAO-FRA), as well as by participating in the technical capacity strengthening workshops on national forest monitoring systems leading to improved integration and coherence among international reporting processes.

- 3) The proposed alternative scenario with a brief description of expected outcomes and components of the project and the project's Theory of Change
- 40. **Project strategy.** The Project strategy to respond to the ETF requirement in the agricultural and forestry sectors is based on the policy of the Government of Reconciliation and National Unity (GRUN), which favours economic and social development in order to protect the most vulnerable among the population by means of direct work with families and communities, creating capacities, knowledge and behaviour that allow the population to confront and recover from disaster risks. It also has in place a working model based on alliances with the productive sector, meaning there is an on-going dialogue intended to deal with the challenges of economic development, creating jobs and poverty reduction.
- 41. The country faces the challenge of having to strengthen its capacity to generate quality information in a timely fashion, leading to the taking of decisions that support the implementation of guidelines 1, 5, 6 and 7 of the National Climate Change Mitigation and Adaptation Policy (PNMACC) while simultaneously complying with the Paris Agreement's ETF.
- 42. The capacity strengthening to be implemented by the CBIT Project in Nicaragua for the agricultural and forestry sectors is based on strengthening the Climate Change Unit that is currently attached to MARENA top management (by offering support to strengthening the unit, both through the CBIT Project and the 4CN/BUR), continue the development of technical capacities at the various institutions participating in ENDE-REDD+ and promoting a link and coordination between the government's two working systems, namely the National Climate Change Response System (SNRCC) and the National Production, Consumption and Commerce System (SNPCC), by involving five institutions: MARENA, INTA, INAFOR and INETER, which participate in both systems, and MEFCCA, which participates in the SNPCC.
- 43. Article 8 of the Decree creating the SNRCC[16]¹⁶ defines that it may interact and articulate with other government institutions and entities and civil society, in particular with the National System for Disaster Prevention, Mitigation and Response and the SNPCC. The CBIT Project will support the interaction and articulation of the two systems regarding their capacity to generate information that facilitates the implementation of PNMACC and the ETF under the Paris Agreement.
- 44. The work with the coordination mechanisms (SNRCC and SNPCC) will also strengthen the intersectoral interrelation between forestry and agriculture, in order to deal with the challenge posed by climate change. This will allow for developing knowledge and information concerning the joint benefits of mitigation and adaptation measures, and their interrelation.

Objective, results, outputs and project activities

- 45. **Objective:** To strengthen technical and institutional capacities in the agricultural and forestry sectors in order to meet the requirements of the ETF reached under the Paris Agreement, in harmony with the Nicaraguan National Human Development Plan and the guidelines of the National Climate Change Mitigation and Adaptation Policy.
- 46. The Project's focus on the forestry sector is based on the work begun earlier through the ENDE REDD+ Project, in which MARENA, INAFOR and INETER are participating. CBIT is a continuation of that process, and it will implement actions on issues regarding improvements identified in the NREF during the decade from 2005 to 2015; national forest monitoring, which contributes to the updating of the national forest inventory and the quantification of GHG emissions and capture; the construction of forest allometric equations; and the monitoring and evaluation (M&E) of actions taken to adapt.
- 47. In the case of the agricultural sector, there exists the need to develop capacities among INTA and MEFCCA staff, in particular as concerns the contributions and roles these institutions will play in the preparation of the national communications and the GHG inventories. There is specific work to be carried out by INTA in the validation of emissions factors in the agricultural sector, the preparation of NDC progress reports, and the development and transfer of technology needed and received. For its part, MEFCCA will contribute the preparation of progress reports on adaptation, follow-up and evaluation of adaptation-related actions and processes in agriculture.
- 48. The Project consists of the following components and outcomes:
- 49. **Component 1:** Strengthening of institutional capacities to meet ETF requirements under the Paris Agreement in the agricultural and forestry sectors.
- 50. **Outcome 1.1** The capacities of the interinstitutional teams at INTA, INAFOR, MARENA, MEFCCA and INETER are strengthened as regards ETF requirements for the implementation of the mandates of the National Human Development Plan and PNMACC guidelines 1, 5 and 6 in the agricultural and forestry sectors.
- 51. **Output 1.1.1** The national coordination platform brings together an interinstitutional team consisting of members of the National Climate Change Response System (SNRCC) and the National Production, Consumption and Commerce System (SPCC), is consolidated and provides follow-up, evaluates strategies and accompanies policy proposals, as per ETF requirements.
- 52. The (SNRCC) is defined as the entity charged with coordinating, advising, studying, controlling and educating people on mitigation and adaptation to Climate Change in Nicaragua (article 7). To that end MARENA has been designated to coordinate it, and will receive the required technical, administrative and institutional support (article 10 of

Presidential Decree No.07-2019). In this context, the national coordination platform to implement the ETF is the SNRCC, and it is therefore being considered to strengthen the Climate Change Unit (UCC), currently attached to MARENA top management (this unit is to be strengthened both through the CBIT and the 4CN/BUR project).

- 53. It is foreseen that with the strengthening of the UCC the Ministry of the Environment will be in a position to facilitate articulation between the SNRCC and the SNPCC in the agricultural and forestry sectors (article 8 of Presidential Decree No. 07-2019). Further, through the CBIT Project the three work and coordination mechanisms will be strengthened that are to support the generation of information which is to flow toward the SNRCC in its role as coordinator for the preparation of reports and national communications to the UNFCCC. These mechanisms are as follows: i) the Monitoring, Reporting and Verification Table established by ENDE REDD+ and headed by MARENA; ii) the National Forest Commission, led by INAFOR and based on Nicaragua's Forestry Law Nicaragua (Law 462); and iii) the Agroecology, Climate Change and Soil Table (MACCS), which is chaired by INTA.
- 54. **Monitoring, Reporting and Verification Table headed by MARENA.** In the forestry sector, and through ENDE-REDD+, a Monitoring, Reporting and Verification Table headed by MARENA has been functioning since the year 2018.[17]¹⁷ It is made up of officials from government institutions that formulate and implement policy on forestry, climate change, research and technological innovation who are experts on the MARENA, INAFOR and INETER information systems. The Table's work is guided by an Operations Manual that is intended to strengthen national processes for the presentation of reports before the UNFCCC regarding the forestry sector.
- 55. Support to the functioning of this MRV Table, incorporated to the SNRCC, will facilitate the inclusion of the CBIT Project's work contents as regards the following: i) the implementation of a work programme to deepen the use of the System for Earth Observation Data Access, Processing and Analysis for Land Monitoring (SEPAL), a tool that will contribute to improving the GHG Inventory and NREF reports; and ii) design a GHG National Evaluation, Monitoring and Surveillance Plan for the AFOLU sector.
- 56. National Forestry Commission (CNF), led by INAFOR.[18]¹⁸ Support to the functioning of this mechanism will facilitate the inclusion of the CBIT Project's work contents as regards the following a: i) the generation of information in the forestry sector that contributes to the preparation of country reports to the UNFCCC; ii) design and offer training through an experience collection and exchange programme in the forest sector, connected to platforms and international research centres on the MRV of greenhouse gases; and iii) a training Programme in the use of tools and guidelines for national forest monitoring.
- 57. Agroecology, Climate Change and Soil Table, chaired by INTA. Support to the functioning of this mechanism will facilitate the inclusion of the CBIT Project's work contents as regards the following: i) the generation of information in the agricultural sector that contributes to the preparation of country reports to the UNFCCC; ii) design and

offer training in through an experience collection and exchange programme in the forest sector, connected to platforms and international research centres on the MRV of greenhouse gases; and iii) a training programme in the use of tools and guidelines for the monitoring of climate change adaptation actions in the agricultural sector.

- 58. These three mechanisms will facilitate interinstitutional coordination in order to prepare the following reports in the agricultural and forestry sectors: i) NDC progress report; ii) follow-up and evaluation report on adaptation actions and processes; iii) report on transfer of technology needed and received; and iv) report on the capacity strengthening needed and received. In addition, they will facilitate the coordination and articulation between the SNRCC and the SNPCC for ETF implementation. During the implementation of the coordination mechanisms it is foreseen other SNRCC actors will participate as well, among them the Private Secretariat for National Policy (SPPN), SDCC, the autonomous regional governments on the Caribbean Coast, INIFOM, the National Council of Universities (CNU) and the private sector.
- 59. The activities under this output are:
- Activity 1.1.1.1 Facilitate the inclusion of the ETF to the MRV Table.
- Activity 1.1.1.2 Facilitate the inclusion of the ETF to the CNF.
- Activity 1.1.1.3 Facilitate the inclusion of the ETF to the MACCS.
- 60. **Output 1.1.2** A training programme for the interinstitutional team is designed and implemented, linked to decision-making on the integration of knowledge regarding national processes, in keeping with ETF requirements.
- 61. A knowledge management process will be developed for this output by means of workshops, exchanges of experience and spaces for technical-methodological discussions keyed to the preparation and presentation of reports to the Convention, following the modalities, procedures and guidelines (MPGs) approved at COP 24 under the Paris Agreement. This will allow institutions to improve their capacities to include transparency actions related to adaptation and mitigation in programmes and projects that are promoted nationwide, as well as to periodically provide information on the agricultural and forestry sectors as a means of monitoring the progress made and identifying priorities so support to these actions continues. A topic to prioritize in training will be the development of capacities in the methodologies available for data collection and procedures on information related to the improvement of understanding, action and support, in a cooperative and facilitative manner, to avoid, minimize and address losses and damages advantage of the best available science). A topic to prioritize in training will be the development of capacities in the methodologies available for data collection and procedures on information related to the improvement of understanding, action and support, in a cooperative and facilitative manner, to avoid, minimize and address losses and damages

associated with the impacts of climate change (Observed and potential impacts of climate change, including those related to extreme weather events and slow-onset events, taking advantage of the best available science).

- Programme design will take into account the different training modalities (online or face-to-face, hybrid, on weekdays or weekends, workshops, courses at postgraduate or master's degree level), all of which will be analysed jointly by the five institutions (MARENA,INTA, INETER, INAFOR and MEFCCA). Further, an interinstitutional agreement will be promoted to design and approve the training programme. In coordination with the Fourth National Communication and the Biennial Update Reports projects, a module on methodologies will be designed and included in the training programme in order to ensure incorporation of gender equality and indigenous and traditional knowledge in the National Communications[19]¹⁹, the Adaptation Plan in the Agricultural Sector and the follow-up to the implementation of the NDC. In the process of designing the training program through the mechanisms implemented by MARENA through ENDE REDD +, the representatives of Indigenous Peoples of the Caribbean, Pacific, Central and North Coast of the country on knowledge will be consulted and requested Indigenous proposal to include to contribute to the preparation and presentation of reports before the Convention.
- 63. The CBIT Project will contribute to gender equality because it is to include training on gender equality, the aim of which is to facilitate that when the Nicaraguan reports are prepared the following are included: a) generate and disseminate evidence through the use of data which has been broken down by sex, in order to justify the importance of closing the gender gap; b) collect and disseminate knowledge on women's priorities and needs; and c) ensure that the needs and priorities of women are documented, heard and channelled. Also contribute to the implementation of the principle of Prior, Free and Informed Consent of Indigenous and Afro-descendant Peoples through consultation and consent of the incorporation of indigenous and traditional knowledge in training programs as well as including representatives of Indigenous Peoples in the actions training in order to develop capacities to integrate transparency actions related to adaptation and mitigation in programs and projects that are promoted at the national level. The training programme will be implemented in alliance with the CNU and in accordance with the thematic contents these institutions may develop, based on the methodological design approved by the five participating institutions.
- 64. The activities under this output are:
- Activity 1.1.2.1 Design a training programme for the ETF.
- Activity 1.1.2.2 Design the contents and include gender equality in the training programme.
- Activity 1.1.2.3 Implement the training programme.

- 65. **Output 1.1.3** Design and implement an experience collection and exchange programme aimed at the interinstitutional work team, connected to platforms and international research centres on the MRV of emissions, in accordance with the ETF for the agricultural and forestry sectors.
- 66. Institutional capacities will be created by means of specialized workshops, the search for information on scientific platforms and the exchange of experience with international reference centres that can contribute to the generation of reliable data for the preparation and delivery of reports to the UNFCCC, in the framework of the Paris Agreements. This will allow the institutions to develop procedures or protocols by which to standardise the information generated in such a way as to best monitor the mitigation activities and evaluate the effectiveness of the policies and strategies being implemented by the institutions. Through ENDE REDD+ and with resources from FCPF, the country has a conceptual document titled "Comprehensive Monitoring, Reporting and Verification System". It was developed for the forest sector and will be sent to the UNFCCC in late 2019.
- 67. The CBIT Project will serve to strengthen this experience by extending it to the agricultural sector through two introductory courses intended to train INTA-MEFCCA-MARENA-INETER staff: 1) a course on Climate Change and Greenhouse Gas Inventories. This is a ten-day workshop, with participation by MARENA staff as instructors, given their experience in National GHG inventorying, as well as a FAO expert who will give technical talks and provide materials relevant to the AFOLU sector. The CNU, through the National Agriculture University (UNA) will offer a diploma. 2) A course on "Construction of a Greenhouse Gas Inventory in Agriculture in the Framework of the AFOLU Sector." This is a three-month long online course. There will be a tutor to facilitate the participant's advancement via an online forum intended to clarify doubts and answer questions on specific issues. This is to be followed by a 10-day face-to-face workshop, with participation by a tutor and perhaps a specialist for technical support. Here again the CNU, through the National Agriculture University (UNA), will offer a diploma. [20]²⁰
- 68. As part of the formulation of this Project, it was agreed to establish a Work Plan for the use of FAO tools in monitoring the forest sector, thus contributing to improving the following reports: National Inventory of Greenhouse Gases; Progress in the Implementation and Scope of Nationally Determined Contributions to the Mitigation of Climate Change (NDC) and the monitoring of Forest Emissions Reference Levels (NREF).
- 69. The tools being considered are the SEPAL, Open Foris, Collect Earth (CE) and the Google Earth Engine.[21]²¹ The issues to be considered for capacity development using FAO tools are as follows: a) detection and monitoring of forest degradation, headed by INAFOR; b) monitoring of forest landscape recovery (increase in coverage) to report to the Bonn Challenge, headed by MARENA; c) early warning on deforestation and forest fires, headed by INETER; and d) baseline for agroforestry systems resilient to climate change, headed by INTA.

70. The first year of project implementation an experience collection and exchange programme will be designed for the agricultural sector, connected to platforms and international research centres on MRV of GHGs. Its design will take into account the FAO platform containing tools for the analysis of AFOLU sector emissions, seeing as these may be of use in support of countries when these work to meet the UNFCCC reporting requirements,[22]²² as well as other centres such as the CGIAR Consortium of International Agricultural Research Centres and its programme on Climate Change, Agriculture and Food Security, as well as the International Livestock Research Institute, considering its knowledge and experience in measuring, reporting on and verifying climate change and its mitigation in the livestock sector.[23]²³

71. The activities under this output are:

Activity 1.1.3.1 Design an experience collection and Exchange programme for the forestry sector.

Activity 1.1.3.2 Implement a Work Programme with SEPAL.

Activity 1.1.3.3 Design and offer training for an MRV programme in the agriculture sector.

Activity 1.1.3.4 Implement a Work Programme to develop a MRV programme in the agriculture sector.

- 72. **Output 1.1.4** Capacities are strengthened at the interinstitutional team made up of INTA, MARENA, MEFCCA, INAFOR and INETER regarding monitoring and evaluation (M&E) of adaptation actions in the agriculture sector, in accordance with PNMACC guideline 1.
- 73. For the purpose of achieving this output, the M&E methodologies will be adjusted and there will be exchanges in good practices and processes by which to validate and subsequently institutionalize them. This action will allow the country to create a monitoring framework with the indicators needed to evaluate the impacts of adaptation activities that are promoted in the agricultural and forestry sectors, which in turn will be an input for the preparation of national reports.
- 74. Through the CBIT Project methodologies will be adjusted according to the MPGs approved at COP 24. The goal is to provide information on the implementation of adaptation activities and the effectiveness of the measures already adopted (Decision 18 / CP.24/ Annex Chapter IV.F.113) on the following issues: (i) how adaptation increased resilience and reduced impacts; (ii) when adaptation measures are insufficient to avoid impacts; and (iii) the effectiveness of the measures implemented (Decision 18/ CP.24/ Annex Chapter IV.F.113).

- 75. A training module will be designed and included to the Programme on methodologies by which to incorporate gender equality and indigenous and traditional knowledge to the monitoring and evaluation of the adaptation actions undertaken in the agricultural sector. Case studies will be written up to verify the viability of data gathering on effectiveness, resilience, impact reduction, information management as well as its frequency and quality control. It is being considered to conduct the case studies with INTA and MEFCCA. In the process of designing the training program through the mechanisms implemented by MARENA through ENDE REDD +, the representatives of Indigenous Peoples of the Caribbean, Pacific, Central and North Coast of the country on knowledge will be consulted and requested indigenous proposed to include as a contribution to adaptation to climate change.
- 76. An introductory course is proposed before carrying out the case studies, in order to train staff at INTA-MEFCCA-MARENA-INETER on the subject of climate change adaptation metrics. This would be a ten-day workshop, with the participation of a FAO expert who will give technical talks and provide materials pertinent to the agriculture and livestock sector, based on a document titled "Follow-up to Adaptation in the Agriculture and Livestock Sectors Indicators of Adaptation to Climate Change".[24]²⁴. Representatives of Indigenous Peoples will also be invited to participate in training actions in order to develop capacities for Monitoring and Evaluation (M&E) of adaptation actions in indigenous territories and accompanied by a specialist from the UN Environment Center-DTU (UNEP DTU Partnership), which produced the publication called "Adaptation measurement systems: perspectives on how to measure, aggregate and compare the results of adaptation"[25]²⁵ This course will be complemented with resources developed by the FAO programme on planning adaptation in agricultural sectors. [26]²⁶
- 77. The activities under this output are:
- Activity 1.1.4.1 Adjust and train staff on M&E methodologies for adaptation to climate change.
- Activity 1.1.4.2 Design and include gender equality in the training programme.
- Activity 1.1.4.3 Carry out case studies on M&E methodologies regarding climate change.
- 78. **Output 1.1.5** A national methodological process is adopted by the interinstitutional coordinating entity (road map) for follow-up and presentation of reports, as set forth in the ETF.

- 79. The road map for follow-up and the presentation of reports as required in the ETF implies offering support to MARENA as coordinator of the National Climate Change Response System (SNRCC), in order to coordinate interinstitutional arrangements between the SNRCC and the Production, Consumption and Commerce System (SNPCC), define roles, responsibilities, information needs and requirements, as well as procedures for the exchange of communications concerning ETF information, in accordance with the MPGs approved at COP 24. It is proposed to implement the activities under this output in a coordinated and complimentary manner to the Fourth National Climate Change Communication and the First Biennial Update Report. This will serve to strengthen the Climate Change Unit currently attached to top management at MARENA.
- 80. The design of the road map takes for its point of departure that Nicaragua has already delivered the following reports covering the period 1992 to 2019: First National Communication, 2001; Second National Communication, 2012; Third National Communication on Climate Change, 2018. On 23 October 2017, Nicaragua joined the Paris Agreement; in 2018 it presented its Nationally Determined Contribution; in January 2019 it presented the Forest Emissions Reference Levels for the decade from 2005 to 2015; and in February 2019 it approved the National Climate Change Mitigation and Adaptation Policy and created the National Climate Change Response System (SNRCC).
- 81. Starting in 2020 Nicaragua will start planning for the delivery of its reports, in keeping with the ETF agreed to at the COP 24 and the basic provisions projected to the year 2030, as illustrated in the figure below.[27]²⁷

Figure 3: Basic ETF provisions projected to the year 2030

Timeline for communicating and reporting under the Paris Agreement This timeline provides an example of reporting under the convention and its agreements. It highlights the transition from the reporting requirements established pre and post Paris Agreement. MPGs under the Paris Agreement will supersede the MRV system established by the Cancun Agreements. Start applying common time frames to nationally Paris Agre ement Katowice Package determined contributions (6/CMA.1) Parties whose NDC contains a timeframe NDC 1 NDC 2 NDC 3 up to 2025, 2030 Communicate any update of NDC1 before 2020 **BRorBUR** NC **BRor BUR BUR or BTR** BTR BTR BTR GHG inventory invent (Last BR (1°BTR 31/12/2022) no later than 2024 (last BUR 31/12/2024) All countries 2023 2028 2033 Developing countries only First Global Stocktake Second Global Stocktake Third Global Stocktake Developed countries only NC National Communications BR Biennial Reports BUR Biennial Update Reports BTR Biennial Transparency Report NDCcommunication - Every Syears NDC sto be communicated at least 9 to 12 months in advance of the relevant meeting of the Configence of the Parties serving as the meeting of the Parties to the Parties.

Parties shall apply the guid at or for NDC accounting to the second and subsequent NDC and Parties may elect to apply such guidance to their first NDC.

- 82. The implementation of the road map will facilitate that SNRCC coordinates the preparation of the following reports over the years from 2019 to 2022: Fourth National Communication; First Biennial Update Report; Draft Update and First NDC Progress Report; the National Adaptation Plan and its First Progress Report; the first report to the UNFCCC on the Safeguards Information System; and the delivery, also to the UNFCCC, of the National MRV Design System.
- 83. The activities under this output are:
- Activity 1.1.5.1 Design a road map for the presentation of reports.
- Activity 1.1.5.1 Support the implementation of the Road Map.
- 84. Component 2: Research and generation of information, leading to the strengthening of the reports and follow-upon progress achieved through adaptation and mitigation activities in the agricultural and forestry sectors.
- 85. Result 2.1 Technical capacities are strengthened as concerns the monitoring, quantification and data analysis needed for the generation of greenhouse gases reports and M&E in the prioritized sectors.
- 86. Output 2.1.1 A National Plan is designed for the mitigation, evaluation, monitoring and surveillance of GHG emissions in the agricultural and forestry sectors, coordinated by MARENA in the framework of the SNRCC.
- 87. This output will be reached through a series of meetings, technical-methodological accompaniment and support to the National MRV System. This would allow for the systematic generation of GHG data and follow-up to mitigation activities through the SNRCC. The plan involves the main actors in the sector providing support to the data-gathering processes, while simultaneously facilitating taking ownership of mitigation measures, the strengthening of research and timely decision-making upon having on hand updated information on the effectiveness of the measures applied.

88. There is already an NREF and updated GHG inventory for the forestry sector. For the agriculture subsector it is still pending to prepare the Plan, based on the GHG inventory which will be part of the Fourth National Communication, to be prepared in coordination with MARENA. It is proposed that this output be coordinated by MARENA, taking into account the mandates and functions ascribed to it in Presidential Decree No.07-2019 and as coordinating entity of the SNRCC.

89. The activities under this output are:

Activity 2.1.1.1 Design the National Mitigation Plan and MRV for the AFOLU sector.

Activity 2.1.1.2 Support to implementation of the Plan.

90. **Output 2.1.2** INAFOR capacities strengthened in the use of National Forest Monitoring System (SMFN) tools (second NFI measurement cycle and adaptation of the Silva Metricus).

91. Through the project there will be workshops, exchanges of experiences and the validation of IT tools that allow for identifying deforestation and reforestation rates, forest cover and carbon captured and fixed, for the purpose of generating national reports. With the information generated, the institutions will be able to undertake real time monitoring on the state of forest resources, analyse changes in plant cover and the pertinence of the management measures taken. All these inputs will strengthen the sectoral planning processes and contribute to the presentation of reports in the UNFCCC framework and the Paris Agreement.

92. The implementation of the following actions, aimed at INAFOR staff, will receive support for: a) modernization of the integrated traceability system on the Web Platform for forest resource management (SIRCOF + Traceability System); and b) improvement of the second measurement cycle of the National Forest Inventory (INF) (increased quality of the GHG inventories, new NREF estimates, better forest emissions factors and the SNM-MRV). There will also be technical support for INAFOR to prepare the second NFI measurement cycle and the adaptation of the Silva Metricus, a system for NFI database management, processing, calculation and reporting, as well as access to and dissemination of data. Documentation: i) development of inventory methodology; ii) transition to a new design and treatment of new data; iii) quality control and assurance; and iv) field manuals.

93. The activities under this output are:

Activity 2.1.2.1 Design training events in the use of SMFN tools.

Activity 2.1.2.1 Implement the training programme.

- 94. **Output 2.1.3** INTA capacities are strengthened through specialized technical and methodological tools that help determine emission factors in the agriculture sector and INAFOR capacities to calibrate allometric equations in forests and agroforestry systems that will lend support to the generation of reports, as required by the ETF.
- 95. Through the training offered, INTA and MEFCCA will gain access to specialised methodologies that will allow them to determine emissions factors in the agricultural sector. This process will facilitate the design of research coordinated by INTA on six (6) parcels, three (3) in the dry zone and three (3) in the wet zone (among the latter: one silvopastoral, one agroforestry and one degraded forest). Carbon dioxide, (CO2), methane (CH4) and nitrous dioxide (N2O) are to be included in the GHG inventories, as per IPCC guidelines, Volume 4 Agriculture, Forestry and Other Land Use (2006). The results of the study will be shared with other SNRCC members, such as SPPN, SDCC, the autonomous governments of the Caribbean Coast, INIFOM, CNU and the private sector.
- 96. INAFOR will also receive support for staff capacity strengthening as concerns the ability to determine emissions factors in the forest sector by calibrating allometric equations with national forest data and agroforestry systems, achieving a lower degree of uncertainty and in accordance with local circumstances. It is proposed to begin the process with a course for CNU representatives and staff from research centres who have some experience working with allometric equations, both in Nicaragua and abroad, and who are ready to learn more about the basic principles of building allometric models: how they are generated, the needed data, economic and technical and time frames, among others. At the workshop a road map will be drawn up for creating these models for Nicaragua. The workshop will also include a section on existing models and data and their implementation using the GlobAllomeTree Platform launched by FAO in support of countries that wish to improve their evaluations of forest biomass and carbon reserves. [28]²⁸

97. The activities under this output are:

Activity 2.1.3.1 Design and training on GHG emissions factors in the agriculture sector.

Activity 2.1.3.2 Validate the emissions factors methodology for the agriculture sector.

Activity 2.1.3.3 Provide training on the creation of allometric equations for forests and agroforestry systems.

Activity 2.1.3.4 Validate the allometric equations methodology.

Activity 2.1.3.5 Prepare and publish the final document.

- 98. Output 2.1.4 Methodologies for the adjustment and implementation of adaptation activities in the agricultural and forestry sector are identified, as per PNMACC guideline 1.
- 99. It is proposed to hold an introductory course before developing the case studies for training of INTA-MEFCCA-MARENA-INETER staff. The course is to cover lessons learnt as concerns climate change adaptation, based on studies prepared using cases from Nicaragua or Mesoamerica. This is to be a ten-day workshop, with participation by a FAO expert who will offer technical talks and materials relevant to the agriculture sector. The interinstitutional team will provide support by making available information about cases in Nicaragua, such as for example the rainwater harvesting experience which took place for productive, ecological and risk management purposes in the Estelí River subbasin. It was titled "The importance of building rainwater water reservoirs with a river basin approach to face climate change" and is an output of the Comprehensive River Basin, Water and Sanitation Management Project. An expert from the UNEP DTU Partnership is to be invited. The CNU, through the National Agriculture University (UNA) will offer a diploma.
- 100. It is foreseen to develop training workshops in methodologies geared toward the incorporation of gender equality and indigenous and traditional knowledge when working to adjust climate change adaptation activities. This output includes the preparation of case studies (at INTA and MEFCCA), the objective being to verify the viability of gathering data on effectiveness, resilience, reduction of impacts, information management, as well as its frequency and quality control.
- 101. Based on the results of the carbon capture, technical-methodological adaptation and evaluation of good practices experiences, INTA and MEFCCA will have greater capacity to propose productive system adaptation mechanisms, in accordance with guideline 1, as defined in the National Climate Change Mitigation and Adaptation Policy, among them to reduce the expansion of the agricultural frontier, increase the efficiency and effectiveness of productive systems and promote changes in knowledge among people so it becomes possible to add value to agricultural production.
- 102. The activities under this output are:
- Activity 2.1.4.1 Review and training on methodologies for adjustments to adaptation actions.
- Activity 2.1.4.2 Training to incorporate the gender and interculturality perspective.
- Activity 2.1.4.3 Validate the methodologies for adjustments to and implementation of adaptation actions.
- 103. Component 3: Dissemination of good practices and lessons learnt at both national and international levels.

104. Outcome 3.1 There are improvements in education, communication and human / institutional capacity as concerns the mitigation of climate change, emissions reductions and their effects on the prioritized sectors.

105. **Output 3.1.1** Lessons learnt and exchanges of knowledge take place in the agricultural and forestry sectors, using national and international platforms (for example, the CBIT global coordination platform). This will lead to improved planning and reporting, in accordance with enhanced transparency requirements.

106. Through the interactions spaces, Nicaragua will share its experiences in capacity strengthening processes as regards the generation of reports which meet ETF requirements, while learning about the good practices and experiences of other countries concerning policies, planning and the implementation of adaptation and mitigation measures, among others.

107. It is proposed to develop a methodology by which to report on good practices, experiences and lessons learnt concerning policies, changes in regulations, coordination activities and mechanisms, taking into account gender equality and interculturality (Decision 18/ CP.24/ Annex Chapter IV.H.116). This methodology must consider its integration to the government's communication platforms, first of all at the National Environmental Information System (SINIA, managed by MARENA), in accordance with PNMACC guideline 7[29]²⁹, as well as INTA's information and dissemination platform. The effort must be made to avoid overlapping and therefore propose the best manner in which to link up with international platforms such as those created by UNFCCC, the CBIT Global Platform and others. The mechanisms for access to environmental information and climate change will be strengthened for people or groups in vulnerable situations, including indigenous peoples and ethnic groups, establishing procedures for attention from the formulation of applications to the delivery of information, considering their conditions and specificities, with the purpose of promoting equal access and participation in accordance with the provisions of the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and Caribbean. [30]³⁰

108. The activities under this output are:

Activity 3.1.1.1 Identify good practices and lessons learnt regarding mitigation and adaptation.

Activity 3.1.1.2 Strengthen the information Platform through SINIA.

- 109. **Output 3.1.2** A dissemination plan is designed and implemented as concerns good climate change adaptation and mitigation practices, in accordance with PNMACC guidelines 1, 5 and 6, in the enhanced transparency framework. It is aimed at public officials, universities and producers in agricultural and forested zones.
- 110. There will be workshops, dissemination materials, spaces for dissemination and feedback that integrate relevant aspects of gender equality and interculturality that allows for raising awareness about how GHG emissions affect the planet and lead to climate change, the Paris Agreement and the importance of the ETF. It will also contribute to the implementation of adaptation and mitigation measures, the dissemination of technologies and transparent and timely communication with the public on the climate change activities (including climate financing) taking place in the country, especially as these relate to the Paris Agreement.
- 111. The activities under this output are:
- Activity 3.1.2.1 To design a dissemination plan for good adaptation and mitigation practices.

Activity 3.1.2.2 To implement a dissemination plan.

- 4) Alignment with GEF focal area and/or impact program strategies
- 112. **Alignment with national priorities.** This Project contributes directly to Nicaragua's compliance with its commitments to the UNFCCC, including the Paris Agreement. The Project objective and results also directly support several national priorities and initiatives, among them:
- •National Human Development Plan 2018-2021 (PNDH)
- •National Climate Change Mitigation and Adaptation Policy (SNRCC)
- •Nicaragua's Nationally Determined Contribution (NDC)
- •National Strategy for Reducing Emissions from Deforestation and Forest Degradation (ENDE-REDD+)
- •Emissions Reduction Programme Document (ERPD)
- •National Forestry Plan (currently being updated)
- •National Climate Change Response System (SNRCC) as defined in article 9 of Decree 07-2019, linked to ETF, as per article 13 of the Paris Agreement.

- 113. **Alignment with GEF priorities.** The CBIT Project is aligned with the focal point of GEF-7 "Climate Change Mitigation" (CCM), specifically with its objective 3, which is to "Foster conditions that are propitious to incorporating mitigation concerns in sustainable development strategies". Specifically, CCM 3-8 is applied: "Foster conditions that are propitious to incorporating mitigation concerns in sustainable development strategies through the initiative to create capacity for transparency".
- 114. This Project also contributes directly to the achievement of CBIT objectives. CBIT Project components 1, 2 and 3 are aligned with the activities stipulated in the CBIT programming instructions, paragraphs 18 and 19. Specifically, (i) to strengthen national institutions which are members of the SNRCC to undertake transparency-related activities, in line with the PNMACC and the PNDH; (ii) to facilitate the use of improved methodologies, guidelines, data sets and tools necessary to meet the ETF; (iii) to manage the information and knowledge needed to satisfy Article 13 requirements; iv) to develop emissions factors for the agriculture and livestock sector; and v) to assist Nicaragua in training on methodological approaches to monitoring, evaluation and communications as concerns adaptation.
- 115. Alignment with FAO priorities. The Project is aligned mainly with FAO's strategic objective 2, on the need to increase and improve the sustainable provision of goods and services in agriculture, agroforestry and fishery. In particular, the Project is aligned with: (i) Organisational outcome 2.3: stakeholders support / adopt international instruments (including regional ones) and governance mechanisms related to support for sustainable agricultural production systems; (ii) Organisational outcome 2.4: Stakeholders take evidence-based decisions when planning and managing agricultural sectors and natural resources, in order to support the transition to sustainable production systems through monitoring, statistics, evaluation and analysis.
- 116. The Project is aligned with FAO's Regional Initiative No. 3 for Latin America and the Caribbean, which promotes the sustainable use of natural resources, the adaptation to climate change and disaster risk management. Through Regional Initiative 3, FAO will promote actions that lead to "Strengthened institutionality in order to implement policies on the sustainable use of natural resources, adaptation to climate change and disaster risk management, with a food and nutrition security approach."
- 117. The Project is aligned with priority area 3 of the Country Programme Framework 2018-2021[31]³¹ "Sustainable Management of Natural Resources and Climate Change". Outcome 3.2: "SNPC (MARENA and INETER) acquire better capacities, mechanisms and tools needed to generate and disseminate climate and agroclimate information, for the purpose of responding to information requirements derived from international commitments and decisions regarding production at national level". Corporative indicator 2.4.3: In 2020, SNPCC has strengthened its institutional capacities to prepare, follow up on and present reports, in accordance with international commitments on climate change. By 2021 technical capacities will have been strengthened to conduct research, quantify and analyse data for the generation of reports on the effects caused by greenhouse gases on the agricultural and forestry sectors.

- 5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing
- 118. Component 1: Strengthening institutional capacities to meet the ETF requirements of the Paris Agreements in the agricultural and forestry sectors.
- 119. Baseline and co-financing. The baseline is the support and grant in kind of the FCPF / BM through which the inter-institutional technical team of MARENA-INAFOR-INETER was trained regarding related carbon emission calculations to national inventories of greenhouse gases, and techniques and methods to quantify and evaluate the rate of deforestation and forest degradation and the ETF Bureau began operating under the ENDE REDD + framework, achieving the development of the first Reference Level (NREF) for the 2005-2015 period, and the development of a capacity building process in the Reference Level (NREF) issues with the inter-institutional technical tables, with a mobilized investment of up to US \$ 122,045. The total contribution in kind of MARENA-INTA-INAFOR-INETER-MEFCCA has a value of US \$ 120,000, which includes the availability of personnel and facilities to implement activities throughout the life of the Project.
- 120. Support and financing the FAO-GEF Project. The ENDE-REDD + work process has been focused on the forestry sector and with the support and financing of the FAO-GEF Project, inter-institutional coordination mechanisms on ETF will be strengthened, first supporting the consolidation of the National Monitoring, Reporting and Verification System and second, expanding inter-institutional collaboration by integrating INTA and MEFCCA as part of the agricultural sector within the framework of the National Climate Change Response System (SNRCC) and articulating actions with the National System of Production, Consumption and Commerce (SNPCC); In terms of capacity development, training needs on ETF contents will be met, including the following: in the field of the national greenhouse gas inventory, training on the development of specific emission factors for the agricultural and forestry sector and construction of allometric equations to estimate carbon in forests according to climate zone; in the field of NDC, training on data collection and management in the forestry and agricultural sector to report their progress; and on the impacts of Climate Change and adaptation training in data collection and management tools to monitor the implementation of adaptation actions since they are pending design and development in the country. The GEF investment will also support the implementation of an experience exchange program using platforms and research centers for greenhouse gas MRVs in the agricultural and forestry sectors. The GEF donation is US \$ 264,604.
- 121. Component 2: Research and generation of information by which to strengthen reporting and follow-up on the progress achieved through mitigation and adaptation activities in the agricultural and forestry sectors.

- 122. Baseline and co-financing: The baseline is the support and the FCPF/WB in-kind grant, through which the following outputs have been generated in the framework of the ENDE REDD+ readiness phase: i) the ENDE-REDD+ strategy document, after broad-based consultation; ii) NREF for the decade from 2005 to 2015; iii) the design of a safeguards information system; iv) design of the national MRV system; v) MARENA, INAFOR and INETER have been strengthened in order to carry out monitoring activities, with a mobilized investment of up to US\$ 5,000,000.[32]³² The total in-kind contribution made by MARENA-INTA-INAFOR-INETER-MEFCCA is of US\$ 212,156.00, which includes the availability of staff and facilities for implementing activities during the entire life of the Project.
- 123. Support and financing from GEF: the FAO-GEF Project will provide support to prepare and implement a GHG evaluation, monitoring and surveillance plan in the AFOLU sector, while strengthening the tools used in forest monitoring, calculation of emissions factors for the agriculture sector and deriving allometric equations for forests and agroforestry systems, as well as training in methodologies by which to adjust adaptation activities. The GEF grant is of US\$ 382,386.
- 124. Component 3: Dissemination of good practices and lessons learnt at national and international levels.
- 125. Baseline and co-financing: The baseline is the MARENA-INTA-INAFOR-INETER-MEFCCA in-kind support for a total of US\$37,323.00, which includes the availability of staff and facilities for implementing activities during the entire life of the Project.
- 126. Support and financing from GEF: the FAO-GED Project will provide support for the dissemination of good climate change mitigation and adaptation practices, thus strengthening the SINIA platform in Nicaragua and supporting environmental education activities. The GEF grant is of US\$ 142,252.
- 6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

- 127. The CBIT Project will contribute to improving local and world environmental conditions by achieving greater transparency in coordinated action and planning activities, as well as strengthening capacities at the National Climate Change Response System, for purposes of follow-up and reporting. Heightened transparency will contribute to meeting commitments made to the UNFCCC, including the Paris Agreement.
- 128. There is evidence that the CBIT Project will contribute directly to the Sustainable Development Goals (SDGs), in particular SDG 13: "Adopt urgent measures to fight climate change and its effects", and more specifically SDG Indicator 13.2: "Incorporate measures on climate change to national policies, strategies and plans" and SDG Indicator 13.3: "Improve education, raise awareness and strengthen human and institutional capacity to mitigate climate change, adapt to it, reduce its effects and establish an early warning system."

7) Innovativeness, sustainability, potential for scaling up and capacity development

- 129. Innovation. The innovative aspect of this initiative is its strengthening of the research processes at the INTA Technological Development Centres, which measure and monitor GHG emissions factors in the agriculture sector. Nicaragua will have the capacity to present updated reports to UNFCCC on its GHG inventories, as well as to estimate the uncertainties related to GHG emissions and removals in the agriculture sector.
- 130. In addition, the CBIT Project will facilitate access to FAO tools such as the "Voluntary Guidelines for Forest Surveillance" (http://www.fao.org/3/a-I6767e.pdf) and SEPAL. These provide a framework of principles and good practices for planning and implementing a multipurpose forest inventory that will allow for laying the foundation for establishing a long-term monitoring system. Along the same lines, the possible use of Open Foris will be considered (gathering of data, analysis and reporting on forest management in Nicaragua). (http://www.openforis.org/)
- 131. Also innovative for the CBIT initiative will be the results achieved by Nicaragua as concerns the adjustment and validation of methodologies through case studies prepared so as to monitor and evaluate adaptation activities in drought-prone areas and semi-humid or wet zones, with the gender equality perspective and acknowledgement of traditional and indigenous knowledge as cross-cutting issues.
- 132. Sustainability. The main driver of Project sustainability is that through CBIT, Nicaragua will be able to strengthen its recently created National Climate Change Response System (SNRCC) and its articulation and coordination with the National Production, Consumption and Commerce System (SNPCC) as an interinstitutional platform which

serves to standardise actions that contribute to mitigating climate change and adaptation in the agricultural and forestry sectors. This is the foundation based on which to consolidate national technical capacities and implement the ETF, and sustainability is created by establishing a road map that will facilitate the methodology on matters such as coordination, monitoring and reporting on the activities carried out by the prioritized sectors. It will also support institutions as they seek to develop systems by which to monitor and evaluate mitigation and adaptation actions that are in line with the enhanced transparency framework as concerns the generation, analysis, integration, communication and dissemination of climate information.

- 133. As the Project is implemented the best practices and lessons learnt through the various climate change adaptation and mitigation initiatives will be systematised and shared in different global and national spaces and platforms, for the purpose of exchanging knowledge and experiences and which others may be able to replicate under similar conditions. This database will also facilitate continuity of the flow and quality of the country reports, including once the Project ends, thus facilitating the application of the Paris Agreement and with a view toward the first Biennial Transparency Report, due in 2024. FAO will apply the Capacity Development approach to guarantee the sustainability of Project results over time. This approach recognize three dimensions of action: 1. Individual dimension that refers to a wide range of actors as policy makers, researches and staff of organizations. 2. The organizational dimension that includes public organizations, civil society and networks of organizations. 3. Theenabling environment that is the context in which individuals and organizations work and includes a country's institutional set-up, power structures and policy and legal frameworks. In general, practical tools of capacity development (http://www.fao.org/capacity-development/resources/practical-tools/en/) will help and inform the project in its different stages and ensure sustainability, which could include the use of tools for the design sustainable capacity development interventions, monitor capacity development, assess learning needs, plan and lead effective learning activities, analyse organizational performance and capture and share good practices.
- 134. Financial uncertainties constitute the main challenge to the sustainability once the Project draws to a close. The government's current plans for the future financing of the activities related to the ETF depend in large measure on international project-based financing. This is not propitious to staff continuity (turnover reduces technical capacity), operational costs and maintenance. Therefore, during project implementation, different approaches by means of which to deal with this challenge will be discussed with government institutions.
- 135. Among the options to be reviewed with government institutions are the following: i) taking advantage, whenever possible, of existing institutional and operational provisions between the SNRCC and the SNPCC; ii) maximizing the proportion of Project resources keyed to capacity development at the institutions charged with delivering the outcomes related to the ETF once the Project ends; and iii) identifying opportunities to work in alliances, for example with the National Council of Universities (CNU) and/or research centres, among other possible actions to work together on issues related to the ETF after Project termination.

- 136. **Potential for expansion.** Project output 1.1.5 has for its goal to elaborate and implement a road map whereby the SNRCC will be in a position to comply with the commitments included in article 13 of the Paris Agreement. With Project support, the objective will be to improve coordination and work mechanisms at the five key AFOLU sector institutions (MARENA, INTA, INAFOR, INETER and MEFCCA). The main Project activities will be designed in such a manner that they allow for easy replication and adoption on the part of other sectors (for instance under mitigation: the energy, industrial processes and solid waste sectors; under adaptation: the agriculture, human settlements, infrastructure, ecosystems, forests, knowledge, research, financing and information sectors).
- 137. Specifically, the processes of collecting data, adjusting methodologies, exchanging experiences and incorporating gender equality and indigenous and traditional knowledge in the preparation and presentation of the AFOLU sector reports will be expanded to include stakeholders who are incorporated to the National Climate Change Response System, thus strengthening capacity in all sectors so they are able to comply with all modalities, procedures and guidelines of the Enhanced Transparency Framework.

8) Summary of changes in alignment with the project design with the original PIF

138. During the Project Preparation Grant (PPG), some minor changes were decided upon, mainly as concerns the wording of the logical framework. The aim was to clarify the scope of some of the outcomes regarding the coordinated work to be implemented between the National Climate Change Response System (SNRCC), created in February 2019 and the Production, Consumption and Commerce System (SNPCC), as well as to link the outcomes and outputs of the agricultural and forestry guidelines as set forth in the National Climate Change Mitigation and Adaptation Policy (PNMACC), as shown in Table 3, below.

Table 3: Changes in outcomes framework linking the SNRCC to PNMACC

| | Current Project Framework | Brief Justification | | |
|-------------|---|---------------------|--|--|
| Outcome 1.1 | 1.1 Capacities at the interinstitutional technical team (INTA, INAFOR, MARENA, MEFCCA and INETER) are strengthened regarding ETF requirements for implementation of National Climate Change Mitigation and Adaptation Policy (PNMACC) guidelines, as well as the PNDH mandates. | | | |

| Output 1.1.1 | 1.1.1. Consolidate the national coordination platform of the interinstitutional technical team (ITT), the National Climate Change Response System (SNRCC) and the National Production, Consumption and Commerce System (SNPCC), to provide follow-up, evaluate strategies and accompany proposals for policies, in keeping with ETF requirements. | This was linked to the SNRCC. |
|--------------|---|---|
| Output 1.1.4 | 1.1.4 Strengthen ITT capacities linked to monitoring and evaluation (M&E) of actions regarding adaptation to CC in the agricultural and forestry sectors, in accordance with PNMACC guideline 1. | Delimited according to PNMACC guideline 1. |
| Output 2.1.1 | Design a national plan for the evaluation, monitoring and surveillance of GHG emissions in the agricultural and forestry sectors, to be coordinated by MARENA in the framework of the SNRCC. | MARENA was designated SNRCC coordinator. |
| Output 2.1.2 | Strengthen INAFOR capacities in the use of tools Silva Metricus) at the National Forest Monitoring System. (second NFI measuring cycle and adaptation of the | National forest monitoring became a strictly INAFOR competency. |
| Output 2.1.3 | 2.1.3 Strengthen INTA capacities by means of specialised technical and methodological tools in order to determine emissions factors in the agricultural sector and at INAFOR, for the purpose of calibrating the allometric equations of forests and agroforestry systems These in turn will support the generation of ETF reports. | INTA and INAFOR competences were staked out. |

[1] https://unfccc.int/process-and-meetings/the-paris-agreement/paris-agreement-work-programme/katowice-climate-package

[2] COP 24. Decision 18 / CMA.1. Modalities, Procedures and Guidelines of the Transparency Framework for Action and Support Regarding Article 13 of the Paris Agreement: https://unfccc.int/documents/193408

[3] The Nationally Determined Contribution and the Third Communication were published on 3 September 2018: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nicaragua%20First/Contribucion%20Nacionalmente%20Determinada%20Nicaragua.pdf and: https://unfccc.int/sites/default/files/resource/Tercera%20Comunicaci%C3%B3n%20Nicaragua-Julio%202018.pdf

- [4] See the NREFs at the following link: https://redd.unfccc.int/files/nref_nacional_vf_170119.pdf
- [5] Approved by means of PRESIDENTIAL DECREE N°. 07-2019 of 1 February 2019. Published in *La Gaceta*, Official Government Publication N° 27 of 11 February 2019.
- $[6] \ Escazu \ Agreement: \ https://observatoriop10.cepal.org/es/tratados/acuerdo-regional-acceso-la-informacion-la-participacion-publica-acceso-la-justicia-asuntos$
- [7] See publication of the NREFs at the following link: https://redd.unfccc.int/files/nref_nacional_vf_170119.pdf

- [8] Nationally Determined Contribution: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nicaragua%20First/Contribucion%20Nacionalmente%20Determinada%20Nicaragua.pdf
- [9] Resolution CFM / 20/2019/4: Selection of the document presented by the Nicaraguan Emissions Reduction Programme in the FCPF portfolio: https://www.forestcarbonpartnership.org/system/files/documents/CF20%20Resolution%204%20Endorsement%20of%20Nicaragua%20ER%20Program FINAL.pdf
- [10] Emissions Reduction Programme Document (ERPD), approved in July 2019: https://www.forestcarbonpartnership.org/system/files/documents/ERDP_ESPA%C3%91OL_310719_VF.pdf
- [11] Design of a Comprehensive Measurement, Monitoring, Reporting and Verification System for the ENDE-REDD+ programme 2018 2040: http://www.marena.gob.ni/Enderedd/wp-content/uploads/Fases/5.%20Doc.%20Dise%C3%B1o%20del%20SNMRV.pdf
- [12] Web site: http://www.marena.gob.ni/Enderedd/
- [13] http://www.marena.gob.ni/Enderedd/wp-content/uploads/MemoriasOrganizados/Componente4/2019/2.pdf
- [14] See publication of the NREFs at the following link: https://redd.unfccc.int/files/nref_nacional_vf_170119.pdf
- [15] https://www.cbitplatform.org/
- [16] Presidential Decree 07-2019, passed on 1 February 2019. Published in La Gaceta, official government publication, No. 27 of 11 February 2019.
- [17] http://www.marena.gob.ni/Enderedd/wp-content/uploads/MemoriasOrganizados/Componente4/2018/1.pdf
- [18] Enabling regulations of the Forestry Sector Conservation, Promotion and Sustainable Development Law (Law 462), article 6: http://legislacion.asamblea.gob.ni/Normaweb.nsf/b92aaea87dac762406257265005d21f7/ba58507a747a5a94062572370068596f?OpenDocument
- [19] An example to consider is the methodology prepared by UNDP: https://www.undp.org/content/dam/undp/library/gender/general/Gender%20Responsive%20National%20Communications%20Toolkit SPA.pdf
- [20] E-learning for GHG inventory for agriculture in Spanish: https://elearning.fao.org/course/view.php?id=327
- [21] FAO tools: http://www.fao.org/redd/resources/tools/es/
- [22] http://www.fao.org/in-action/micca/resources/tools/ghg/es/
- [23] CGIAR tools: https://samples.ccafs.cgiar.org/measurement-methods-overview/

- [24] http://www.fao.org/3/a-i8145e.pdf
- [25] The document is available at the following website: http://comunidadpnacc.com/media/k2/attachments/Sistemas de medicion de la adaptacion.pdf
- [26] Sitio web del programa NAP-Ag: http://www.fao.org/in-action/naps/resources/en/
- [27] https://info.bc3research.org/wp-content/uploads/2019/06/ES-COMPLETO.pdf
- [28] Sitio web: http://www.globallometree.org/
- [29] PNMACC guideline 7: Link the information and dissemination platform on technical-scientific knowledge on climate change to SINIA, in order to contribute to keeping timely and precise information which can be used for taking decisions vis-à-vis a changing climate. Acknowledge farmers and organizations that incorporate research and innovations, with measurable results concerning mitigation and adaptation to climate change.
- [30]Escazu Agreement: https://observatoriop10.cepal.org/es/rights/informacion
- [31] Signed between FAO and the government of Nicaragua on 18 October 2018.
- [32] ENDE REDD+ progress: http://www.marena.gob.ni/Enderedd/

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

Please refer to annex E of the PRODOC

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

N/A

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why: No

Please provide the Stakeholder Engagement Plan or equivalent assessment.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

- 1. The main Project objective is to strengthen a transparency system with the participation of the various national actors in the agricultural and forest sectors that will be key to the process of generating quality information to support decision-making and support public policy efforts. In addition, these actors will contribute to monitoring mitigation and adaptation activities to be implemented in accordance with NDC priorities for the aforementioned sectors.
- 2. During the development of this project, several stakeholders were consulted, including government institutions such as MARENA, INTA, INETER, INAFOR, MEFCCA and SPPN that are members of both the National Climate Change Response System and the National Production System, Consumption and Commerce. These stakeholders were involved during the project design phase through 30 work sessions; 3 thematic workshops related to emission factors in the agricultural, gender and mapping sectors and detection of land use changes through remote sensing techniques using the SEPAL platform; 20 work sessions through 4 consultancies specialized in gap analysis for the implementation of the reinforced transparency framework and development of the capacity development plan, INTA capacity diagnosis to determine emission factors in the agricultural sector, INAFOR capacity diagnosis in the use of tools for forest monitoring, construction of allometric equations for the forestry sector and capacity development plan and a gender analysis. Also, there was participation during 7 International Missions with FAO Technical Officers in Forest Monitoring and Evaluation, Forest Officer (REDD + LAC Coordinator), REDD and GHG Inventory Specialists and Specialists in the SEPAL platform. Annex G contains a description of the consultation mechanisms, recommendations and dates of the process implemented during Project formulation, as well as the proposals made for the implementation phase, including the initial workshop held on 2 April 2019 and the final validation workshop of 19 August 2019.
- 3. The National Council of Universities is also a member of SNRCC, was consulted and is therefore included as a stakeholder. It will participate in the execution of this Project by facilitating training activities, knowledge exchanges and the formulation of case studies, as part of activities under outputs 1.1.2, 1.1.3, 1.1.4, 2.1.3 y 2.1.4.

- 4. In the project design phase, the participation of CSOs through meetings that these institutions developed with Producer Organizations, Community Base Organizations and Indigenous and Afro-descendant Peoples Organizations that participate in the execution of the project has been consulted through INTA and MEFCCA of Adaptation to the change in the markets and the effects of climate change (NICADAPTA) and the project Sustainable Development of the Livelihoods of Rural Families in the Dry Corridor of Nicaragua (NICAVIDA). The incentive to ensure that the CSOs identified play an expected active role in products 1.1.4, 2.1.4 and 3.1.2 is that the information generated can be disseminated through INTA with the Centers for Technological Development (CDT), conducting training and practical demonstrations with the Technology Transfer Directorate and in coordination with the Cooperatives, Companies and Universities and the MEFCCA through Experiences and Knowledge Exchange events that include training, trade fair and field visits, with the participation of rural families that produce activities selected in the North and Central Region in the Dry Corridor of the country and in the Autonomous Regions of the North and South Caribbean Coast. Regarding Indigenous Peoples, it is expected that in the process of designing the training program through the mechanisms implemented by MARENA through ENDE REDD +, the representatives of the Indigenous Peoples of the Caribbean, Pacific, Central and North Coast of the country they will be consulted on the Practices of the Native Peoples of Nicaragua that contribute to Climate Change Adaptation.
- 5. The following table contains a list of relevant actors that will contribute to Project implementation, based on their functions in the National Climate Change Response System and the Production, Consumption and Commerce System:

Table 4 Actors and their roles in Project preparation, design and implementation

| Stakeholder name / | Role or mandate linked to the ETF | Involvement in the CBIT Project | Consultation mechanism during |
|--------------------|-----------------------------------|---------------------------------|-------------------------------|
| type / profile | | | Project implementation |

| Stakeholder name / type / profile | Role or mandate linked to the ETF | Involvement in the CBIT Project | Consultation mechanism during Project implementation |
|---|---|---|---|
| MARENA / direct beneficiary / national government institution | Ministry of the Environment and Natural Resources Coordinates the National Climate Change Response System (SNRCC) Member of the National Production, Consumption and Commerce (SNPCC) Through the SNRCC it coordinates the formulation of the following reports: National Climate Change Adaptation Plan National communications and GHG inventories Climate risk evaluations Calculation of national GHG emissions factors (by means of academic-scientific research) Collects and disseminates progress made by Nicaragua on climate change mitigation and adaptation | Overall lead agency for CBIT Project activities. As SNRCC coordinator and participant in the SNPCC it will play a leading role in the development of the articulation and coordination mechanism between the two systems when preparing the ETF reports. Coordinates the National Environmental Information System (SINIA), which in accordance with guideline 7 of the PNMACC is the information and dissemination platform for scientific-technical knowledge on climate change. As such , MARENA will take the lead for outputs 1.1.3 and 3.1.1. Coordinates the ENDE-REDD + programme, through which it chairs the MRV Table and the National Forest Monitoring System. As such , MARENA will take the lead for outputs 1.1.3 and 2.1.2. MARENA will coordinate the Project to prepare the Fourth Communication and the First BUR to be introduced for financing to GEF, and may also complement CBIT Project actions. MARENA will also play an active role in outputs 1.1.1, 1.1.2, 1.1.4, 1.1.5, 2.1.1 and 2.1.4 | The Initial Workshop Coordination with the Project Steering Committee (PSC) Coordination with the Project Management Unit |

| Stakeholder name / type / profile | Role or mandate linked to the ETF | Involvement in the CBIT Project | Consultation mechanism during Project implementation |
|---|--|---|---|
| INTA / direct beneficiary / national government institution | Nicaraguan Institute of Agricultural Technology INTA contributes by carrying out scientific research and promotes technological innovations intended to increase agricultural productivity, the sustainable management of natural resources, food sovereignty and poverty reduction. It has a highly professional profile as regards technologies and good agricultural practices. INTA transfers, shares and disseminates the results of its research and innovations to SPCC technicians and producers at large. It generates new technologies that contribute to the increase in sustainable productivity, making adaptations to climate change and food security in several of the country's agroclimate zones, technological development centres, experimental stations and research and technological innovation farms. INTA is a member of the both the SNPCC and the SNRCC. | As SNRCC coordinator and participant in the SNPCC it will play a leading role in the development of the articulation and coordination mechanism between the two systems when preparing the ETF reports. As a member of the SNRCC it will be crucial to strengthen its institutional capacity to calculate GHG emissions factors in the agriculture sector (output 2.1.3). INTA will also play an active role in outputs 1.1.1, 1.1.2, 1.1.4, 1.1.5, 2.1.1, 2.1.4 y 3.1.2. | The Initial Workshop Participates in the Project Steering Committee Participates in the formulation of the APO The Initial Workshop The Initial Workshop The Project Steering Committee |

| Stakeholder name / type / profile | Role or mandate linked to the ETF | Involvement in the CBIT Project | Consultation mechanism during Project implementation |
|---|--|--|---|
| INAFOR / direct beneficiary / national government institution | National Forestry Institute Promotes, administrates and regulates forest resources aimed at achieving sustainable development and adaptation to climate change. It collects and manages information about forest mass and areas of natural reforestation, among others. INAFOR is a member of the both the SNPCC and the SNRCC. | INAFOR will lead on output 2.1.3, intended to generate data which will serve as inputs to the calculation and update of emissions factors and the formulation of allometric equations for the forest sector and agroforestry systems. INAFOR will also play an active role in outputs 1.1.1, 1.1.2, 1.1.3, 2.1.1, 2.1.3 y 3.1.1. | The Initial Workshop Participates in the Project Steering Committee Participates in the formulation of the APO |
| INETER / direct beneficiary / national government institution | Nicaraguan Institute of Territorial Studies INETER undertakes studies and carries out research on natural phenomena, emphasising analysis of the territory's physical elements and disaster risk reduction from an environmental and climate perspective. The Institute generates data on activities, produces maps and reports on changes in forest cover and emissions. INETER is a member of the both the SNPCC and the SNRCC. | INETER generates information relevant to the forest and agriculture sectors. This institution administrates the land use, forest cover and production monitoring system. It is a member of the National Forest Monitoring System (SNMB) and the forest sector MRV Table. It will therefore have a leading role in outputs 1.1.3 and 2.1.1 and play an active role in outputs 1.1.2, 2.1.3 y 3.1.2. | The Initial Workshop Participates in the Project Steering Committee Participates in the formulation of the APO |

| Stakeholder name / type / profile | Role or mandate linked to the ETF | Involvement in the CBIT Project | Consultation mechanism during Project implementation |
|---|---|---|---|
| MEFCCA / direct beneficiary / national government institution | Ministry of Family, Community, Cooperative and Associative Economy MEFFCA is charged with coordinating and implementing policies, programmes and strategies, strengthening capacities leading to the development of the family, community, cooperative and associative economy and contributing to improve production and productivity by promoting sustainable practices. MEFFCA is a member of the SNPCC. | As a member of the SNPCC, MEFFCA will have a leading role in outputs 1.1.4 and 2.1.4, whose aim is to adjust methodologies, train its staff and validate case studies on monitoring, evaluation and adjustment of adaptation activities, in accordance with PNMACC guideline 1. INETER will also play an active role in outputs 1.1.2, 1.1.3, 2.1.3 and 3.1.2. | The Initial Workshop Participates in the Project Steering Committee Participates in the formulation of the APO |
| SPPN / indirect beneficiary / national government institution | Private Secretariat for National Policy – Office of the Presidency The SPPN heads the Nicaraguan delegations to the COP meetings and ensures the inclusion of the ETF to policies it proposes for approval by the President of Nicaragua. | A member of the SNRCC, the SPPN will be an indirect beneficiary of the CBIT Project. | · Initial Workshop |
| CNU / indirect beneficiary / civil society organisation | National Council of Universities The CNU is the national entity that carries out research, designs curricula and advances innovations, all of which are very valuable when working on climate change adaptation and mitigation measures. The CNU is a member of the SNRCC. | The capacity strengthening activities foreseen in output 1.1.2 will be coordinated with the CNU. The CNU will also play an active role in outputs 1.1.3, 1.1.4, 2.1.4 and 3.1.1. The CNU is a member of the SNRCC and will therefore participate in the preparation of the ETF reports. | The Initial Workshop Participates in the formulation of the APO |

| Stakeholder name / type / profile | Role or mandate linked to the ETF | Involvement in the CBIT Project | Consultation mechanism during Project implementation |
|---|--|--|--|
| Civil society producers, community grassroots organisations, indigenous and afrodescendant populations Indirect beneficiary / civil society organization | These are the people who undertake specific climate change adaptation and mitigation activities at local level in the agricultural and forestry sectors. | CSOs will play an active role in outputs 1.1.4, 2.1.4 y 3.1.2, and will have leading roles in the validation and dissemination of the M&E methodology on adaptation measures and the identification of good practices. They will also contribute to the dissemination of lessons learnt and the implementation of climate change mitigation and adaptation actions in the agricultural and forestry sectors. In addition, they are important players in the training and information exchanges processes on these topics. | Participates in the formulation of the APO |

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

 $\label{provide the gender analysis or equivalent socio-economic assessment.$

Please refer to Annex J of the PRODOC for the Gender assessment.

Please refer to Annex H of the PRODOC for the Gender Action Plan.

- 1. Based on the GEF Gender Equality Action Plan, the FAO gender equality policy and strategy, the UNFCCC Gender Action Plan and articles 7 and 11 of the Paris Agreement, National Climate Change Adaptation and Mitigation Policy, and Law 648, the Project will take the measures necessary to ensure the participation of women in all its activities. The Project will ensure that women's specific needs are met and that they enjoy equal access to Project activities.
- 2. During the Project preparation process a gender workshop was held, with participation by gender focal persons at government institutions represented on the interinstitutional technical team working on climate change. The results obtained were included in the INTA, MARENA, INAFOR, INETER and MEFCCA capacities diagnosis and gender equity will be incorporated to ETF implementation in the AFOLU sector. See Annex J of the PRODOC
- 3. The Project will take into account the gender analysis including within the design and implementation of the training program a module on methodologies to incorporate gender equality in the preparation of national reports to be submitted to the UNFCCC (National Communications, Adaptation Plan in the Agricultural Sector and Monitoring the implementation of the NDC). The Project will implement specific activities in order to include gender equality to three outputs: i) design and implementation of a training programme for staff at MARENA, INTA, INAFOR, INETER and MEFCCA; ii) the training and development of case studies on M&E methodologies for adaptation activities in the agricultural and forestry sectors; and iii) the training and development of case studies on adjustment methodologies for adaptation activities. These are to be implemented by the Project through outputs 1.1.2, 1.1.4 and 2.1.4.
- 4. The purpose of gender equality training is: a) generate and disseminate evidence through the use of data that is disaggregated by sex to support the importance of closing the gender gap; b) build and disseminate knowledge about the needs and priorities of women; and c) ensure that the needs and priorities of women are documented, heard and channeled. During Project formulation methodologies were identified which can be used to design the training programme in such a way that it incorporates gender equality when preparing the national communication, taking for their point of departure a UNDP document;[1] a study on adaptation metrics developed by the UN Environment and the Centre for Climate Transparency;[2] and the case studies and methodologies published on the climate adaptation platform developed between UNDP and FAO.[3]
- 5. The Project outputs framework includes generating information for the indicators of outputs 1.1.2, 1.1.4 y 2.1.4. Information on gender equality gaps will be obtained and analysed through the case studies to be carried out. In the development of the case studies to be implemented by INTA and MEFCCA, a module on methodologies to incorporate

gender equality in the Monitoring and Evaluation (M&E) of adaptation actions in the agricultural sector will also be included. The objective is to observe the feasibility of data collection, frequency and quality to specify cost estimates and the socioeconomic impact of adaptation from a gender perspective, greater precision on gender gaps and to know about factors (social, economic, productive environmental) that generate greater vulnerability of men and women. The Project Management Unit (PMU) will coordinate this work with the staff at each of the gender units or similar entity designated at each of the participating institutions. Article 6 of Law 648 mandates that these should "design or create an entity charged with coordinating, advising on and evaluating the enforcement of the gender approach in Nicaraguan public policy."

[1] UNDP methodology: https://www.undp.org/content/dam/undp/library/gender/general/Gender%20Responsive%20National%20Communications%20Toolkit SPA.pdf

 $[2] \ Document \ web \ site: \ http://comunidadpnacc.com/media/k2/attachments/Sistemas_de_medicion_de_la_adaptacion.pdf$

[3] NAP-Ag programme web site: http://www.fao.org/in-action/naps/resources/en/

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women

Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

- 1. INTA and MEFCCA are members of the Production, Consumption and Commerce System (SNPCC) that works with private sector producers. In the Project baseline, initiatives have been identified that are implemented by these two institutions and that contribute to compliance with PNMACC guideline 1. For instance, the project titled "Adaptation to Changes in Markets and the Effects of Climate Change" (NICADAPTA) works with coffee and cocoa producers by incorporating them to markets and reducing vulnerability to climate change in 56 coffee and cocoa-growing municipalities in the provinces of Nueva Segovia, Madriz, Estelí, Jinotega, Matagalpa, Boaco and seven indigenous territories in the north and south Caribbean regions. Along the same lines, the project titled "Sustainable Development of Livelihoods Among Rural Families in the Nicaraguan Dry Corridor" (NICAVIDA) works with producer families in 37 municipalities in the provinces of Madriz, Nueva Segovia, Estelí, Matagalpa, Boaco, León, Chinandega and Managua, including indigenous peoples. The project strives to help increase their incomes, improve the nutritional quality of their diets and strengthen their capacities to adapt to climate change, specifically by facilitating access to water.
- 2. Private sector producers will be involved during Project implementation, as they are the ones who at local level implement specific climate change adaptation and mitigation activities in the agricultural and forestry sectors. They provide important inputs to the identification of good practices and lessons learnt in the implementation of these activities and will play leading roles in the processes of case studies validation, training and exchanges of information on these matters.
- 3. At the beginning of the second year, INTA and MEFCCA will identify those private sector producers who are to participate in case studies concerning agricultural activities undertaken in the dry, semi-humid and humid zones, as per ETF modalities, procedures and guidelines.

5. Risks

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

1. The risks to the Project are shown in Table 5, below.

Table 5: Risks and mitigation measures

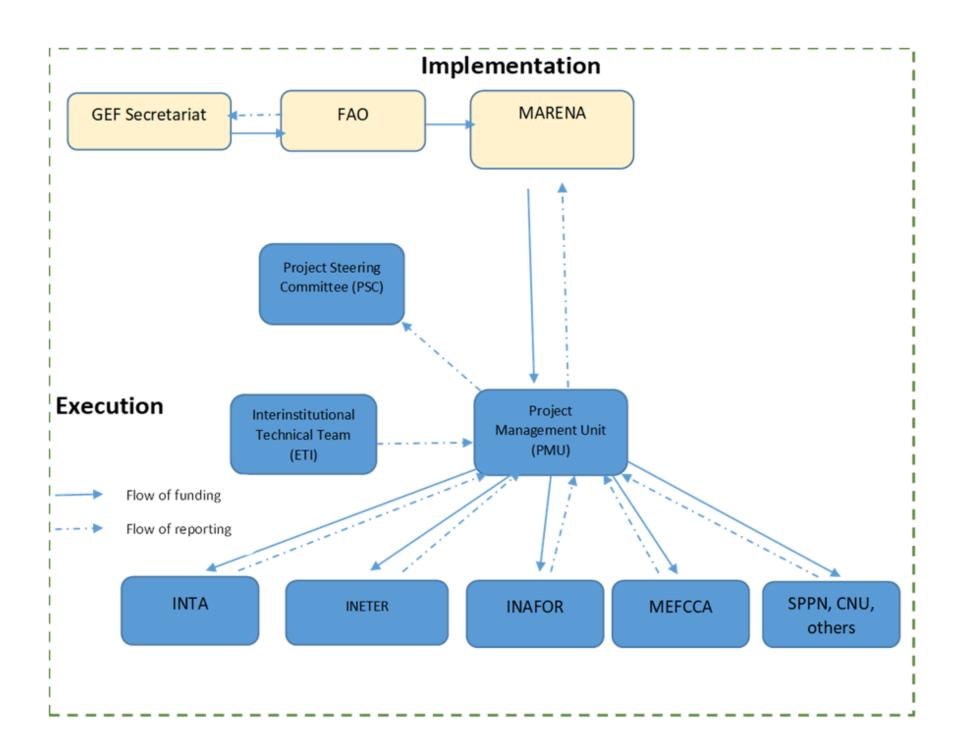
| Risk description | Impact | Probability | Mitigation actions | Entity in charge |
|------------------|--------|---------------|---------------------|------------------|
| Tush description | Impact | 1 1 obtainity | Talligution metrons | Energy in energe |

| Lack of support from government authorities during Project implementation. | Low | Improbable | This initiative has taken place upon petition of the government of Nicaragua, once it ratified its adhesion to the Paris Agreement. The Project proposal was prepared in a participatory fashion, jointly with the interinstitutional technical team (ITT) appointed by the government. This evidences there is a high level of commitment to its execution, in accordance with national priorities. | MARENA as SNRCC coordinator |
|--|----------|---------------------|--|---|
| Low levels of institutional participation during implementation of response activities developed by the project. | Low | Improbable | Support measures: i) The Project will strengthen the SNRCC's work and its coordination mechanisms with the SNPCC to ensure that ITT members continue interested in participating. ii) The institutions will guarantee the participation of its technicians in the various training and experience exchanges activities. | MARENA-INTA- INETER-INAFOR- MEFCCA |
| Sustainability of Project results over time. | Moderate | Relatively probable | Once the Project concludes, the institutions must ensure the continuity of the activities by means of the national budget, insofar as allowed by the country's economic situation. FAO will apply the Capacity Development approach to guarantee the sustainability of Project results over time. This approach recognize three dimensions of action: 1. Individual dimension that refers to a wide range of actors as policy makers, researches and staff of organizations. 2. The organizational dimension that includes public organizations, civil society and networks of organizations. 3. The enabling environment that is the context in which individuals and organizations work and includes a country's institutional set-up, power structures and policy and legal frameworks. | MARENA as SNRCC coordinator, jointly with the Ministry of Finance |

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

- 1. MARENA will act as the Project Executing Partner in close consultation with other line ministries participating in activities. MARENA will have the executing and technical responsibility for the project, with FAO providing technical oversight as GEF Agency.
- 2. One important vehicle for collaboration will be through Letters of Agreement (LoA) that will be elaborated and signed between FAO and the respective partners. This includes project co-executing entities, such as government institutions, civil society organizations, and academia if established in the Annual Work Plans approved by the Project Steering Committee (PSC). Funds received under an LoA will be used to execute Project activities in conformity with FAO's rules and procedures. National co-executing agencies will be designated by the PSC.
- 3. The Project's organizational structure is as follows:



- 4. A Project Steering Committee (PSC) will be established and co-chaired by FAO and MARENA. It will be comprised of representatives from INTA, INETER, INAFOR, MEFCCA, SPPN etc. The members of the PSC will act as project Focal Point(s) in their respective institutions. As Focal Points, the concerned PSC members will: (i) technically oversee activities in their sector, (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project, (iii) facilitate coordination and links between the project activities and the work plan of their agency, and (iv) facilitate the provision of co-financing to the project.
- 5. The National Project Coordinator (NPC) will be the Secretary to the PSC. The PSC will meet at least twice a year to ensure: i) Oversight and assurance of technical quality of outputs; ii) Close linkages between the project and other ongoing projects and programmes relevant to the project; iii) Timely availability and effectiveness of co-financing support; iv) Sustainability of key project outcomes, including up-scaling and replication; v) Effective coordination of government partner work under this project; vi) Approval of the six-monthly Project Progress and Financial Reports, the Annual Work Plan and Budget; vii) Making by consensus, management decisions when guidance is required by the National Project Coordinator.
- 6. The government will designate a National Project Director (NPD). The NPD will be a MARENA staff and will be have the responsibility of supervising and guiding the NPC (see below) on the government policies and priorities. He/she will also be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project partners. He/she will be responsible for requesting FAO the timely disbursement of GEF resources that will allow the execution of project activities, in strict accordance with the Project Results-Based Budget and the approved annual work plans and budgets (AWP/B) for the current project year.
- 7. A Project Management Unit (PMU) will be co-funded by the GEF and established within (add location). The main functions of the PMU, following the guidance of the Project Steering Committee, are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the AWP/Bs. The PMU will be composed of a National Project Coordinator (NPC) who will work full-time for the project lifetime. In addition, the PMU will include (please add other components/staff).
- 8. The National Budget and Operations Officer (part-time) will be responsible for the day-to-day financial management and operation of the project including raising contracts and procure other needed inputs in accordance with the approved budget and annual work plans. The Budget and Operations Officer will work in close consultation with the NPD, Budget Holder, Lead Technical Officer and project executing partners, particularly with the FAO Representation in the country, and will take the operational responsibility for timely delivery of needed inputs to produce project outputs.
- 9. Financial management of GEF resources will be carried out according to FAO rules and procedures.
- 10. The Food and Agriculture Organization of the United Nations (FAO) has been selected by the participating country as the GEF Implementing Agency for the proposed project, and as such, will provide project cycle management services as established in the GEF Policy. FAO will be responsible for providing oversight, technical backstopping and supervision of project implementation to ensure that the project is being carried out in accordance with agreed standards and requirements. Technical backstopping will be provided

by FAO in coordination with government representatives participating in the Project Advisory Committee. At the request of the Government of MARENA[1], the FAO will be responsible for:

- •Administrating GEF funds in accordance with FAO and GEF rules and procedures;
- •Overseeing project implementation in accordance with the Project Document, work plan, results-based budget, co-financing plan, and the rules and procedures of FAO and GEF;
- •Providing technical guidance, project quality assurance, timely delivery of inputs and outputs, and achievement of project results;
- •Conducting at least one supervision mission per year; and
- •Reporting project progress to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review(s), and submit financial reports to the GEF Trustee.
- •Identification and/or recruitment of personnel to be assigned to the project and management of their contracts, specifically the SEPAL Tool Development Specialist, the Specialist in Course on Inventory of Greenhouse Gases on agriculture, the Specialist to prepare the 2nd INF measurement cycle and the Silva Metricus Adaptation Specialist;
- Definition and facilitation of training activities such as the Course on basic principles for the construction of allometric models, the Course on climate change and Inventory of greenhouse gases and the SEPAL tool workshops.
- 6.b Coordination with other relevant GEF-financed projects and other initiatives
- 11. During the process of Project formulation the need was identified to coordinate CBIT Project actions with several initiatives described in Table 3 of this document.
- 12. One of these initiatives is the Project being formulated for the preparation of Nicaragua's Fourth National Communication and first BUR. It is thought that through both it will be possible to create capacities in the updating of national GHG inventories (2005-2015), the updating of the First Biannual Update Report 2016-2018, as well as a number of tasks related to ETF modalities, procedures and guidelines which were approved in decision 18 of COP 24, held in December 2018. These two projects can mark the onset of the process of developing capacity to prepare the contents required for the Biennial Transparency Report (BTR).
- 13. Also identified was the opportunity to coordinate CBIT Project actions with two GEF projects: ID 5277 (approved and in the process of transfer to FAO as executor) and 9579 (in the process of formulation with FAO). In addition, there will be coordination with the BioCLIMA Project currently under formulation with technical assistance from FAO for introduction to the Green Climate Fund, and the Emissions Reduction Programme (ERPD) recently approved by the FCPF Carbon Fund.

- 14. Coordination with all these activities will take place through MARENA, given that it is the institution designated as SNRCC coordinator. Likewise, MARENA has been designated as National Focal Point for the CBIT Global Initiative. It is also the national counterpart for GEF projects, the el ERPD-FCPF and the BioCLIMA Project which is being formulated for introduction to the Green Climate Fund.
- 15. There is an opportunity to support MARENA as it grows into this function of coordinating all these initiatives, based on the strengthening of the Climate Change Unit, currently attached to MARENA top management and which is to receive support through the projects regarding the Fourth National Communication, the First BUR and the Nicaragua CBIT Project.
- 16. Table 6, below, reflects the complementarities and synergies to be developed between the Fourth National Communication, the First BUR and the Nicaragua CBIT Project.

Table 6: Complementarity and synergy between the Fourth National Communication, the first BUR and the Nicaragua CBIT Project, in keeping with the ETF

| Modalities, procedures | 4NC and 1ER BUR (specific outputs) | CBIT Project Nicaragua | Budgetary complementarity |
|-------------------------------|------------------------------------|------------------------|---------------------------|
| and guidelines (MPGs), | | (specific outputs) | |
| transparency framework for | | | |
| measures and support (COP | | | |
| 24- 18/CMA.1) | | | |

| National inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases (Paris Agreement, Art. 13.7a) | The information on the GHG inventories for the years 2000 and 2015 is prepared and updated for the National Communication; the years 2016 and 2018 for BUR in the following sectors: energy, industrial processes, solid waste, agriculture, uses and changes in land use. Improved capacity at SNRCC institutions to generate GHG inventories, including functions such as planning, preparation, management, description and documentation. | Development of specialised technical-methodological tools by which to determine emissions factors in the agricultural sector and formulate allometric equations for forests and agroforestry systems. | 4NC: US\$ 180,000 CBIT: US\$ 86,680 |
|--|---|--|---|
| The information needed to follow-up on the progress achieved in the application and compliance with the nationally determined contribution (Paris Agreement, Art. 4) | The evaluation and validation of the NDCs is carried out. Current gaps in measurement, reporting and verification of GHG emissions are analysed and a proposal for an evaluation, monitoring and surveillance of these emissions is prepared for the energy, solid waste and industrial processes sectors. Capacities are strengthened among SNRCC institutions as regards information—gathering, analysis and reporting on indicators relevant to progress made in NDCs. A proposal adjusted to the NDCs is prepared. | Strengthen capacity to measure, report and verify emissions, in accordance with the ETF for the agricultural and forestry sectors. National forest monitoring capacities are strengthened. Design of a national evaluation, monitoring and surveillance plan for GHG emissions in the agricultural and forestry sectors (AFOLU). | 4NC: US\$ 125,000 CBIT: US\$ 169,845 |

| Information regarding the effects of climate change and adaptation efforts (Paris Agreement, Art. 7) | The climate change scenarios for the years 2020, 2030, 2050 and 2100 are prepared. An evaluation is made of the country's vulnerability to climate change. The most vulnerable territories and sectors are identified and knowledge is collected on the needs and priorities of women. | developed, including as concerns adjustment and adaptation actions in the agricultural and forest sectors. | 4NC: US\$ 112,000 CBIT: US\$ 70,795 |
|--|---|--|--|
| | Progress made in the implementation of adaptation actions are reviewed, in accordance with the National Climate Change Mitigation and Adaptation Policy, including progress made on activities in the spheres of gender equality and the use of indigenous and traditional knowledge. | | |
| | National capacities are strengthened to negotiate international financing by means of an analysis of activities related to avoiding, minimizing and dealing with losses and damages associated with climate change. | | |

| Information on support in the shape of financing, technology transfer and capacity-building needed and received (Paris Agreement, Art. 9-11) | Technology transfer needed and received support identified. Users are trained on access to and use of meteorological information, thus reducing damage in agriculture. Relevant information is generated on technology transfer, the systematic observation network, education, training and raising of public awareness, capacity-building and creation of networks. | A training programme is designed and implemented. SINIA strengthened. Dissemination of good practices ref. climate change adaptation and mitigation. | 4NC: US\$ 40,000 CBIT: US\$ 152,686 |
|--|---|--|--|
| Prepare national communications (NCs) and the Biennial Transparency Report (BTR) | Establish and adopt a national methodolog the SNRCC, including analysis of financial and strengthening needed and received for on-going reports (NCs and BTRs), as set forth in the ETF. National coordination platform consolida ETF through the SNRCC, in articulation with the Unit attached to MARENA top management is strength. | I technical needs, and capacity- g follow-up and presentation of atted in order to implement the e SNPCC. The Climate Change | 4CN: US\$ 395,000 (including PMC of US\$77,450) CBIT: US\$ 383,236 (including PMC of US\$78,477) 4NC: US\$ 852,000 |

CBIT: US\$863,242

TOTAL: US\$1,715,242

7. Consistency with National Priorities

^[1] If the GEF Agency executes totally or partially GEF funds, there should be an explicit request signed by the GEF OFP(s) of the participant country(ies) indicating the specific roles and responsibilities of all partners, including any execution activities provided by a GEF Agency. The request should provide a sound justification for the execution activities that the GEF Agency may perform.

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAS, NAPS, ASGM NAPS, MIAS, NBSAPS, NCs, TNAS, NCSAS, NIPS, PRSPS, NPFE, BURS, INDCs, etc.

- 1. Third National Communication on Climate Change, presented to UNFCCC in July 2018: https://unfccc.int/sites/default/files/resource/Tercera%20Comunicaci%C3%B3n%20Nicaragua-Julio%202018.pdf
- 2. Nationally Determined Contribution (NDC), presented to UNFCCC in August 2018: https://www4.unfccc.int/sites/NDCStaging/Pages/Search.aspx?k=Nicaragua
- 3. National Biodiversity Strategy and its Nicaragua Plan of Action 2015-2020, presented to the CBD in 2016: https://www.cbd.int/doc/meetings/ecr/cbwecr-2014-09/other/cbwecr-2014-09-presentation-24-es.pdf
- 4. National Land Degradation Neutrality Strategy to 2030, presented to UNCCD in 2018: https://knowledge.unccd.int/sites/default/files/ldn_targets/2018-11/Nicaragua%20LDN%20TSP%20Country%20Report.pdf
- 5. Nicaraguan Goals to Reach Land Degradation Neutrality to 2030, presented to UNCCD in 2018: https://knowledge.unccd.int/sites/default/files/ldn_targets/2018-11/Nicaragua%20LDN%20Country%20Commitments.pdf
- 8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

- 1. Through component 3, the Project will promote an exchange of knowledge at national level via information networks such as SINIA, as well as SNRCC and SNPCC meetings and work sessions with members of both systems. At international level the exchange of knowledge will be promoted using the CBIT Global Platform and Nicaragua's participation in its meetings, virtual forums, workshops and by acceding to its information platform.
- The identification and analysis of lessons learnt is an on-going process, and the need to communicate these lessons as one of the Project's central contributions is a requirement that must be delivered on with a frequency not inferior to every 12 months. FAO-GEF will provide a format and help the Project team to classify, document and report on any lessons learnt. Specifically, the Project will ensure there is coordination, best practices are followed and knowledge outputs are generated, based on the current projects in the Nicaraguan portfolio. Good practices will be identified and analyzed, to be integrated and documented within the communication material for broad dissemination in existing global platforms, such as the CBIT Global Coordination Platform web page (https://www.cbitplatform.org/) and annual global meetings. Further, taking advantage of the FAO/GEF global project "Building global capacity to increase transparency in the forest sector (CBIT-Forest)" which aims to strengthen the institutional and technical capacities of developing countries to collect, analyze and disseminate forest-related data (GEF ID 10071). The CBIT-Forest project will also facilitate exchange of knowledge among transparency practitioners through activities e.g national/regional workshops that will take place in the LAC region. Nicaragua can participate with funding from its national CBIT to those activities. See attached the Knowledge Management and Communication Plan.
- 3. The Project will identify and participate, whenever pertinent and appropriate, in scientific networks, whether or not policy-based, and in any other network, as this may benefit Project implementation via lessons learnt. The project will identify, analyse and share lessons learnt that may be beneficial in the design and implementation of future projects.
- 4. The Project communications strategy is based on the preparation of bulletins and dissemination of reports that Nicaragua may prepare in the period between 2020 and 2022, as well as new practices, experiences and lessons learnt as regards climate change mitigation and adaptation documented in the framework of the CBIT Project in Nicaragua. These will then be disseminated through the web platforms of participating institutions (MARENA, INTA, INETER, INAFOR, MEFCCA), the FAO platform and the CBIT Global Platform.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

1. Project monitoring will take place through the Project Management Unit (PMU) and the person in charge of the FAO budget. Project performance will be monitored using the Project outcomes matrix, including indicators (baselines and goals), work plans and yearly budgets. At Project outset, the outcomes matrix will be reviewed in order to identify i)

outputs; ii) indicators; and iii) gaps in the information available and baseline objectives. An expert is to develop a detailed M&E plan, to be based on the outcomes matrix. The plan will define the specific requirements for each indicator (data collection methods, frequency, responsibilities for collecting and analysing data, etc.).

2. Table 7 Monitoring and Evaluation plan

| Type of M&E activity | In charge | Budget US\$* | Time frame |
|---|---|--|---|
| | | | |
| Initial workshop | Project General Coordinator FAO Country Office FAO GEF | GEF: \$2,500 | During the first three months of the Project |
| Initial workshop report | Project Work Team FAO Country Office | PMU schedule | Immediately after the workshop |
| Annual work plan and results-based budget (AWP/B) | · PMU in consultation with LTO | PMU schedule | Within a month of Project onset and later, annually, covering the July-to-June reporting period |
| Baseline information updated | · PMU in consultation with LTO | PMU schedule | At the beginning and end of each Project year. |
| Supervisory visits | · PMU, LTO, FLO | FAO visits made possible by GEF Agency tariffs (others through the Project travels Budget, as needed) | Annual |
| Project progress reports (PPR) | · PMU, LTO, BH | UEP schedule | At the latest one month after each biannual reporting period (January-June and July-December) |

| Type of M&E activity | In charge | | Budget US\$* | Time frame |
|--------------------------------------|--|---------------|--------------|--|
| | | | | |
| Project Implementation Review (PIR) | Drafted by the NPD, with LTO supervision and BH. Approved and presented to GEF by the FAO-GEF Coordination Unit. | GEF agen | cy fees | 1 August of each reference year |
| Co-financing Reports | · PMU | PMU sche | edule | Annual, jointly with PIR |
| GEF follow-up tools | · LTO | GEF agen | cy fees | At Project mid-point and termination |
| Independent Terminal Evaluation (TE) | General Project Coordinator and Project work team FAO NI FAO GEF External consultants (evaluation team) | GEF: \$40,000 | | At least three months before Project termination |
| Final Workshop | General Project Coordinator FAO country office FAO GEF | GEF: \$5,0 | 000 | One month before Project termination |
| Processing of Final Report | Project work team FAO NI Consultants engaged according to need | GEF: \$6,600 | | At least three months before Project termination |
| Total Project Budget for M&E | | GEF | \$ 54,100 | |

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

1. The socioeconomic benefits of the Project will be obtained through the validation and dissemination of climate change adaptation measures to take place with protagonists in the agriculture sector in those activities selected in the northern and central zones of Nicaragua's Dry Corridor and the North and South Caribbean Autonomous Regions. This validation and dissemination will allow for making the following information known to protagonists, based on ETF guidelines: (i) how adaptation increased resilience and reduced impacts; (ii) when adaptation is insufficient to avoid impacts; and (iii) how effective the implemented adaptation measures are.

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Classification of indicators:

Indicator 1: Scale: 0 - 4:

- 0. Inadequate: Staff at the institutions generate only limited information and data by which to facilitate PNMACC implementation.
- 1. Partially adequate: The institutions have staff that generates information and data that are available and facilitate the implementation of PNMACC guidelines 5 and 6. There is limited information and data on guideline 1, gender equality and indigenous and traditional knowledge in the reports sent to the UNFCCC.
- 2. Moderately adequate: The institutions have staff that are participating members of the interinstitutional technical team that receives training and begins to contribute to the implementation of PNMACC guidelines 1, 5 and 6 and the preparation of country reports for delivery to the UNFCCC.
- 3. Adequate: The institutions have staff whose capacity to generate information and data has been expanded. They are able to define frequency and road map and include information and analysis on gender equality and indigenous and traditional knowledge, which contributes to the implementation of PNMACC guidelines 1, 5 and 6. The first reports and data are produced and integrated to the Fourth National Communication and the First BUR to be delivered to the UNFCCC.
- 4. Very adequate: Information and data are available with the frequency planned for in the road map and measures to ensure quality are taken. This contributes to the implementation of PNMACC guidelines 1, 5, 6 and 7. The team actively participates and plays its roles in the production of Nicaragua's BTR in the SNRCC framework.

Indicator 3: Scale: 1-4:

- 1. Low: MARENA only
- 2. Medium-Low: MARENA-INETER-INAFOR
- 3. Medium-High: MARENA-INETER-INAFOR-INTA-MEFCCA-CNU
- 4. High: All members of the National Climate Change Response System SNRCC participate

Indicator 4:

Flows of information prioritised in accordance with the ETFs:

- 1. Follow-up to implementation and NDC achievements
- 2. Follow-up to implementation of adaptation activities (effectiveness, resilience, impact reduction)
- 3. Reports on support needed and received for the development of technology transfer
- 4. Report on the creation of needed and received capacity

Indicator 6:

Outputs to be generated through training and the use of forest monitoring tools:

- 1.
- Detection and monitoring of forest degradation. Headed by INAFOR.

 Monitoring and recovery of forest landscapes (gains in forest cover) for reporting to the Bonn Challenge. Headed by Early warning on deforestation and forest fires. Headed by INETER. 2. 3.

Baselines for agroforestry systems resilient to climate change. Headed by INTA. 4.

| Results chain | Indicators | Baseline | Mid-term target | Final target | Means of verification | Assumptions | Responsible for data collection | | | |
|---------------|---|----------|-----------------|--------------|---|--|----------------------------------|--|--|--|
| | Objective: To strengthen technical and institutional capacities in the agricultural and forestry sector in order to meet the requirements of the enhanced transparency framework eached under the Paris Agreement, in harmony with Nicaraguan National Human Development Plan and the guidelines of the National Climate Change Mitigation and Adaptation Policy. | | | | | | | | | |
| - | Indicator 1: Degree to which capacities have been strengthened among the interinstitutional technical team (MARENA, INTA, INAFOR, INETER, MEFCCA) to generate information in keeping with ETF MPGs and in support of the implementation of PNMACC guidelines 1, 5, 6 and 7. (Scale: 0 - 4) | 0 | 2 | 3 | Progress reports on the implementation of PNMACC in the framework of the preparation of the Fourth National Communication | The arrangement of timely information is articulated with the availability and access to UNFCCC means of implementation. | MARENA (SNRCC coordinator) | | | |

MARENA.

| Results chain | Indicators | Baseline | Mid-term target | Final target | Means of verification | Assumptions | Responsible for data collection |
|---|--|----------|-----------------|--------------------------------------|--|--|----------------------------------|
| - | Indicator 2: Number of direct beneficiaries, broken down by gender, as an additional benefit of the GEF investment. | 0 | 100 | 200 (100 men 100 women) monitored | Reports on participation of the interinstitutional technical team in training and reporting activities. | Mechanisms and procedures are implemented to ensure articulation and coordination between the SNRCC and SNPCC. | MARENA (SNRCC coordinator) |
| Component 1: | | | | | | | |
| Outcome 1.1: Capacities strengthened among the interinstitutional technical team (MARENA, INTA, INAFOR, INETER, MEFCCA) regarding ETF requirements for implementation of National Human Development Plan mandates and guidelines 1, 5 and | Indicator 3: Increase in participation by institutions and their staff, with equal opportunities for women and men (MARENA, INTA, MARENA, INAFOR, INETER, MEFCCA) in the preparation of country reports, according to ETF MPGs. (Scale: 1 - 4) | 2 | 2 | 3 | Report on the participation of the interinstitutional team, broken down by gender, in the preparation of the reports Nicaragua delivers to the UNFCCC. | Articulation and coordination mechanisms and procedures are implemented between the SNRCC and the SNPCC. | MARENA (SNRCC coordinator) |

| Results chain | Indicators | Baseline | Mid-term target | Final target | Means of verification | Assumptions | Responsible for data collection |
|--|--|----------|-----------------|--------------|--|---|---------------------------------|
| 6 of the Climate Change Mitigation and Adaptation Policy in the agricultural and forestry sectors. | Indicator 4: Number of women and men enjoying equal opportunities on the interinstituional team (INTA, MARENA, INAFOR, INETER, MEFCCA), the SNRCC and the SNPCC to strengthen their capacities to comply with ETF requirements in the four prioritized information flows, including gender equality and indigenous and traditional knowledge. | 0 | 25 | 50 | Certificates awarded and / or records kept of training and aide- memoirs of Project events. | It is expected that all institutions involved participate in the training offered by the Project and that they use the knowledge acquired when preparing ETF reports. | MARENA / PMU |

Outputs:

- 1. The national ITT coordination platform, with members from the SNRCC and the SNPCC, is set up to provide follow-up, evaluate strategies and accompany policy proposals, in keeping with ETF requirements.
- 2. A training programme is designed and implemented for decision-making linked to the inclusion of knowledge concerning national processes, in keeping with ETF requirements.
- 3. A programme to exchange and capture experiencies is implemented that is keyed to the ITT and makes use of platforms and international research centres working to measure, report on and verify (MRV) emissions for the agricultural and forestry sectors, in keeping with ETF requirements.
- 4. ITT capacities are strengthened as concerns the M&E of adaptation activities in the agricultural and forestry sectors, in keeping with PNMACC guideline 1.
- 5. A national methodological process is established and adopted by the SNRCC (road map) with the aim of following up on and presenting reports, in keeping with ETF requirements.

Component 2:

| Results chain | Indicators | Baseline | Mid-term target | Final target | Means of verification | Assumptions | Responsible for data collection |
|--|--|----------|-----------------|--------------|--|---|---------------------------------|
| Outcome 2.1: Technical capacities are strengthened for the monitoring, quantification and analysis of the data necessary for the generation of GHG emissions reports and the monitoring and evaluation of | Indicator 5: Number of evaluation, monitoring surveillance plans regarding GHG emissions in the agricultural and forestry sectors implementeed, in keeping with ETF MPGs. | 1 | 2 | 2 | Aide-memoirs from the MRV Table and reports issued on agricultural and forestry sectors. | Project Nicaragua | MARENA / PMU |
| the prioritized sectors. | Indicator 6: Number of institutions that make up the Forest MRV Table and increase their capacities to use tools and guidelines for national forest monitoring. | 0 | 5 | 10 | Certificates awarded and / or records kept of training and aide- memoirs of Project events. | It is expected that all institutions involved participate in the training programme and implement the knowledge acquired in the preparation of ETF reports. | |

Outputs:

- 1. A national evaluation, monitoring and surveillance plan for GHG emissions in the agricultural and forestry sectors is drawn up, coordinated by MARENA in the framework of the SNRCC.
- 2. INAFOR capacities are strengthened in the use of tools (second NFI measurement and adaptation of the Silva Metricus) for national forest monitoring.
- 3. INTA capacities are strenthened through specialised technical and methodological tools that help determine emissions factors in the agriculture sector; INAFOR capacities are strenthened to calibrate allometric equations in agroforestry systems and forestss, in support of the reports generated in keeping with ETF requirements.
- 4. Methodologies are identified for the adjustment and implementation of adaptation activities in the agricultural and forestry sectors, in accordance with PNMACC guideline

| Results chain | Indicators | Baseline | Mid-term target | Final target | Means of verification | Assumptions | Responsible for data collection |
|---|--|----------|-----------------|--------------|---|--|---------------------------------|
| Component 3: | | | | | | | |
| Outcome 3.1: Improved education, communication and institutional human capacity as concerns the mitigation of climate change, emissions reductions and its effects on the prioritised sectors. | Indicator 7: Number of bulletins published on the subjects of good practices, experiences and lessons learnt in matters of mitigation and adaptation to climate change. | 0 | 3 | 6 | Bulletins published on the SINIA website and linked to international platforms. | Bulletins published on the SINIA website and linked to international platforms. | MARENA / PMU |

Outputs:

- 1. Lessons learnt and knowledge acquired in the agricultureand forest sectors are shared on national and international platforms (e-g. the CBIT global coordination platform), in order to improve the scheduling and presentation of reports, in accordance with enhanced transparency requirements.
- 2. A dissemination plan is designed and implemented on good practices in climate change adaptation and mitigation, as per guidelines 1, 5 and 6 of the PNMACC, in the framework of enhanced transparency. It is aimed at public officials, universities and and gricultural and forestry producers.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Not applicable

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

| | | GETF/LDCF/SCCF Amount (\$) | |
|--|-----------------|---------------------------------|------------------|
| Project Preparation Activities Implemented | Budgeted Amount | Amount Spent to date (31/07/19) | Amount Committed |
| Salaries for professionals (5011) | 2,381 | 0.00 | 2,381 |
| Consultants (5013) | 35,915 | 28,486.27 | 7,428.73 |
| Travel (5021) | 6,000 | 3,847.86 | 2,152.14 |
| Training (5023) | 4,400 | 3,330 | 1,070 |
| Expendable procurement (5024) | 500 | 282.13 | 217.87 |
| General operating expenses (5028) | 804 | 431.52 | 372.48 |
| TOTAL | 50,000 | <u>36,377.78</u> | 13,622.22 |

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake exclusively preparation activities (including workshops and finalization of baseline, when needed) up to one year of CEO Endorsement/approval date. No later than one year from CEO endorsement/approval date. Agencies should report closing of PPG to Trustee in its Quarterly Report.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

Not applicable

ANNEX E: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.



Total



Submitted to GEF Secretariat Review

Go To Home